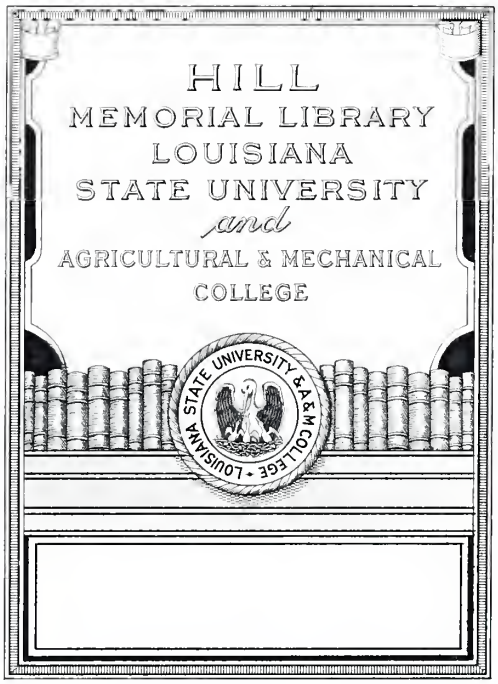

HILL
MEMORIAL LIBRARY
LOUISIANA
STATE UNIVERSITY
and
AGRICULTURAL & MECHANICAL
COLLEGE
LOUISIANA STATE UNIVERSITY & A&M COLLEGE

Digitized by the Internet Archive
in 2012 with funding from
LYRASIS Members and Sloan Foundation

http://archive.org/details/sugarbulletin19420amer

Chemistry Library,
Louisiana State University,
University, La.

THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

We stand for the encouragement of Home Industries as against foreign Competition

Vol. 20 NEW ORLEANS, LA., OCTOBER 1, 1941 No. 1

# Report of President W. F. Giles

*(Presented at the Annual Meeting of the American Sugar Cane League, September 25th, 1941)*

In submitting my Annual Report I will say, right at the outset, that the past 12 months, in our industry of cane growing and sugar production in Louisiana, have been different in very many ways, and in very important ways, from any other 12 months within the recollection of any of us here in this room. It has been a period during which pressure from regulatory agencies has increased literally by leaps and bounds, and the necessity for us to conform to various types of regimentation has been forced upon our perception day by day and more insistently than ever before, and in more serious forms than ever before.

Now, like caged birds, we are becoming so accustomed to living inside the bars that it is doubtful whether, if we were released from them, we would any longer possess the initiative and daring and strength of wing by which alone we can rise to great and successful accomplishments.

In referring to this situation it is not my intention to protest against it in this Report or to place the blame for it. I mention it only as a new and progressing development in our affairs, a development so far reaching that it cannot be passed over in complete silence.

It will be useless for me, or any of you who are here today, to speculate as to whether things will always be thus, or whether the regimentation of business by Government is going to be permanent or temporary. We can only wait and see.

The American Sugar Cane League, dedicated by the terms of its charter to the development, advancement and encouragement of cane growing and cane sugar and cane syrup production in the United States, has been, of course, vitally affected by the new theory of business regulation by the Government that is in such rapid course of adoption. On the one hand the League finds that persons in high authority are assuming to tell us what is best for our industry instead of leaving such decisions to the judgment of those engaged in it, and this takes away from us all the interesting work of planning our progress and thus contributes to our leisure; but on the other hand, a thousand obstacles, inequities and annoyances are created for us by our official guides and mentors and we are kept so busy protesting, explaining and trying to circumvent the evils of them that we are far busier than ever before.

The main points that occur to me in connection with our work since our last annual meeting may be sketched as follows, mentioning them in the order in which they come into my mind, rather than the order of their importance.

The educational, statistical and factual compilations that have been carried on by the League for some time have all been continued and in some directions expanded. This has been done in the face of the fact that the short crop of last year materially curtailed the amount of money the League could avail itself of. Facts and statistics may be said to represent the ammunition in our arsenal and there has been no shortage permitted.

There has been a notable enlargement of the League's influence and membership in the western part of the Louisiana sugar district and the separate organization which existed for many years in that part of our territory was dissolved several months ago and in its place a luncheon club was formed, the fact being recog-

THE
# SUGAR BULLETIN

414 Whitney Bldg., New Orleans

Marcel J. Voorhies, Editor

Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
Subscription Price, 50 Cents per Year.

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE

**President, W. C. Kemper, Franklin, La.**

1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

**EXECUTIVE COMMITTEE**

W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

LOUISIANA STATE UNIVERSITY LIBRARY

## Officers and Members of the Executive Committee elected at the Annual Meeting of the American Sugar Cane League, September 25th, 1941:

President, W. C. Kemper
1st Vice President, John J. Shaffer, Jr.
2nd Vice President, George L. Billeaud
3rd Vice President, Dubourg Thibaut
4th Vice President, C. J. Bourg
Treasurer, Frank L. Barker

EXECUTIVE COMMITTEE

W. F. Giles
Edward J. Gay
R. H. Chadwick
Walter Godchaux
Stephen C. Munson
Louis Wilbert
Warren Harang
H. Langdon Laws
C. F. Dahlberg
Chas. A. Farwell
Charles O'Brien
James A. Lanier
Leon J. Landry
David W. Pipes
W. Prescott Foster
J. P. Duhe
E. N. Kearny
Geo. M. Murrell,
Louis Robichaux
L. A. Borne

nized that all such work as the League under behalf of our sugar industry naturally covers and takes care of all the parts of the sugar district, rendering a duplication of effort along that line unnecessary. This was all very pleasing and gratifying to our organization.

The League did some very effective work in connection with a proper solution of the problem of the pollution of streams and bayous by discharges from the sugar factories and helped to prevent injustices and hardships in this connection in a number of instances.

There were, of course, very many hearings held both in Louisiana and in Washington during the year by officers of the Government, especially officers of the sugar section of the U. S. Department of Agriculture and by committees of Congress. These hearings covered a variety of subjects of importance, as you all know, and the League arranged for a proper presentation of facts by competent spokesmen at all of them.

The League also officially offered the full cooperation of the Louisiana sugar factories to the Government if the power and machinery in them were needed in furtherance of the defense program.

The establishment of a disease-free seed cane area in Louisiana was also fostered through the League's Contact Committee in cooperation with the scientists of the Baton Rouge and Houma Experiment Stations.

The work of the Educational Committee under the chairmanship of Mr. Chas. A. Farwell deserves detailed enumeration, but in a report of this kind I can only summarize it by saying that it deserves, and I am sure receives, high praise from all of us.

During the year some sections of the sugar district showed indications of a deterioration in some of the varieties of cane being cultivated, and at the League's request Dr. E. W. Brandes, Head Pathologist in Charge of the Bureau of Plant Industry, U. S. Department of Agriculture at Washington, recognized by all of us as a sort of guardian angel of our Louisiana sugar industry, spent some time here and, I am happy to say, was able to reassure us. An additional variety of cane is now being released for planting known as C. P. 33-243.

An event which I cannot allow to pass unnoticed was the sale of the twenty-five acres of land at Harahan, Louisiana, which the League has owned for a great many years. It was purchased from us for $10,000.00 cash by the Central Homestead Association. This land was originally acquired as the site for a State Sugar Experiment Station, but was never used for that purpose, owing to the centralization of all such work in Baton Rouge. I must also record, with pleasure, the removal of the League's New Orleans office from 407 Carondelet Street, where it has been since the League was organized in 1922, to the more modern, air cooled Whitney Building.

The activities of our Washington Office have been important and interesting. I feel that my reference to them in this report ought not to be confined to legislative matters alone, although the impression may be held that that office concerns itself exclusively with legislation. It deeply concerns itself also in matters of broad policy.

Our members will recollect that at the beginning of the present one-year term, the immediate concern of cane growers was how much acreage to plant. The Sugar Act was about to expire, and the Sugar Division announced provisional proportionate shares.

Later on the Act was extended for one year, and the provisional determination became official, including an acreage curtailment of about 10%. This year the acreage announcement had been made provisionally that proportionate shares would be based upon 120% of the 1940 acreage, amounting to approximately 108% of 1938. The Secretary of Agriculture later stated that there will be no limitations enforced on the 1942 crop, if the present national emergency continues. In the light of experience, it is my opinion, if I may take the liberty of expressing it, that it should be the function of the League to maintain, as far as possible, a satisfactory proportionate sharing of the sugar program. If quotas are to be continued in future years, then care must be exercised not to reopen and renew the distressing problems which involved acreage cuts and plowups in the past several years. Now that there is an equitable ratio of acreage, establishing the status of each farm in relation to all other cane farms, based upon the historial background existing in 1938, that ratio should be maintained inviolate for the future, regardless of any temporary lifting of acreage restrictions.

When I appeared before the Senate Finance Committee in October, 1940, I emphasized that the sugar program could very easily be made acceptable to domestic producers and that, until these amendments were given full consideration by Congress, the Louisiana sugar industry would be unwilling to support any extension beyond one year. We find ourselves in practically the same position in 1941, and the justification for our position has been amply proved during the year of extension.

We have made repeated attempts to bring together the continental groups, knowing full well that when these groups agree upon a reasonable program, Congress will be favorably responsive. This was demonstrated in 1937, when a compromise Bill was finally agreed upon. In a lesser degree, this was demonstrated last year on the Ellender amendments and earlier in this session on the Adams Bill in the Senate, when a two to one vote was recorded in favor of the domestic industry.

It has been my ambition and hope that during my term of office a satisfactory long-term program might be worked out. Although the full measure of this goal has not been achieved, I can certainly state that our efforts to bring the continental sugar groups together and to harmonize the points of view with regard to essential amendments have brought the industry much closer together, and before very long the tangible results should be attained.

The recent price-fixing order of Mr. Leon Henderson has upset the domestic sugar industry and has furnished another example of the lack of coordination in the Federal Government in matters directly affecting the domestic sugar industry. The fixing of a price at 3.50c at a time when the market was 3.80c has brought to light again the disagreeable fact that sugar is a political football and a whipping boy. Mr. Henderson himself has testified before Congressional Committees that the price of sugar has not risen in anywhere near the same percentage increase as the price of other foods. He has more recently furnished evidence to prove that the general costs of commodities have risen 24%. Yet an order is issued fixing the price of sugar 30 points below the market, in absolute disregard of the facts which should have served as a complete justification for such a modest rise. If the consumers are permitted to continue to pay higher prices on all other foods excepting sugar, then it follows that the producer of sugarcane will have to pay higher prices for all that he buys as a consumer and to accept a lower price for what he sells as a producer.

For several years the sugar industry has been controlled under the Sugar Act of 1937. Yet the policies of Government have been interfered with by the existence of an International Sugar Agreement, with obligations on the part of the United States, without benefits; in like manner, the provisions of the Philippine Independence Act serve as a deterrent to the proper amendment of the Sugar Act; the Cuban Trade Agreement has established a new relationship which has already been changed once and is now the subject of negotiations for possibly other changes; the Export-Import Bank has loaned money to the Cuban sugar industry to finance the production of 400,000 tons of sugar, while domestic producers are curtailed in acreage and required to finance themselves at a higher unit cost. Now comes the national defense agency called OPACS which sets the price of raw sugar. The State Department is considering giving Cuba an additional advantage of 15c through a change in tariff, and the OPACS reduces the expected income by 30c. The situation has reached a point where it becomes necessary to inquire whether the Federal Government is willing to recognize and meet the conflicts and the Government-created problems of the sugar industry, at least to the extent of considering a program of coordination whereby men in business can plan with a reasonable degree of certainty as to the future.

In a national sense the domestic sugar industry has for years contended that the best insurance policy the Nation can have in the matter of price and supply of sugar is a healthy and expanding domestic sugar industry. This has never been better demonstrated than in 1941, and I feel assured that the long-delayed acceptance of our plea for justice and a chance to prosper will be ours eventually, if we continue to fight, undismayed and determined.

Many other things that I would like to mention in connection with the League's work are still in my mind, but it is inexpedient for me to make this Annual Report any longer than it already is. All our standing committees have worked conscientiously and intelligently. Our General Manager, Mr. Marcel J. Voorhies, has performed the duties of his office in a manner beyond criticism and the same is true of the able manager of our Washington Office, Mr. Clarence J. Bourg, who is so well and favorably known to you all.

With this meeting I will terminate my occupancy of the office of President of the League, in which I have served for two years. The cooperation and consideration I have rceeived from all of you merit my gratitude and appreciation and all this I now want to express in the fullest measure. The honor you have conferred on me I now lay down and I pledge my best efforts to whoever succeeds me in the Presidency of our organization.

331059

# A Statement By Our New President

I sincerely appreciate the honor that has been conferred on me today, and I feel I can add the thanks of all of the officers as well.

I promise you an active and continuous effort toward a good administration. I am hoping for, and expecting, full support and help from the other officers elected and from each member of the executive committee, and the other committees of the League. We all of us know that the employees will continue their good work regardless of the person holding the presidency.

As soon as possible I shall call a meeting of the officers to help me in the selection of the various committee memberships and chairmen. When you receive notification of any appointment, I request that you accept your duties without any reservations. The League is no stronger than the work done by its members, and it cannot remain a healthy organization if too much of the work is done by only a few people.

All of the officers want, and solicit, your suggestions and criticisms. This is *our* League, and all should participate in the decisions that must be made. I particularly want to stress the need of more active work by the growers.

Now, it is going to be a pleasant task to undertake my first official act as your President. I believe I will get more personal pleasure out of this than from any other act I may perform in the next year. I appreciate having been accorded the privilege of presenting this token to Colonel Giles, upon his completion of his term as our President.

As you probably know, the Colonel assumed active duties in our organization only six years ago, and during that time has been an officer continuously. It will be my ambition to emulate his very friendly control over our affairs. During his term the spirit of the League has been fine and our membership has grown amazingly. He has served during strenuous times but he, like old wine, has become more valuable with each year. He also seems to become stronger as he ages.

And now, Colonel Giles, I present to you from the retiring Executive Committee (and through them, from the 11,000 growers of our organization) this walking cane. This is a small token of our appreciation of your devotion to the Louisiana Sugar Industry. We don't infer that you are going to relax and now lean on this cane, but all of us know that the new President plans to lean on you and we believe the added weight might make a cane useful.

# Washington Notes

## New Basis for Computing Parity Needed

*(Contributed by Dudley Smith, Economist and Statistician)*

The present method of computing parity prices for Louisiana sugar cane makes no allowance for the improvement in the cane crop over the last 30 years. The parity price for the present rich cane varieties is no more than it would be for the low sucrose varieties grown before the first world war. Parity price is supposed to be a standard for cane prices, but growers are severely penalized by the oversight of the increased sucrose content of the cane in computing it.

Notwithstanding the faulty basis for computing parity, sugar cane prices under the quota control program have been below this standard by a margin which has been uncomfortably large for growers. Prices for the 1940 crop were the most favorable of the past several years but still were 14 to 25 per cent below parity, depending on how the parity is computed. So many conflicting statements have been made regarding parity prices that a thoroughgoing analysis is necessary to dispel some of the smokescreen thrown about them.

### Method of Computing Parity Price

The formula for computing parity prices was established in the *Agricultural Adjustment Act of* 1938. The general idea is to enable the farmer to purchase as many of the things he ordinarily buys with the proceeds from his crops as he did before the first world war, which was a relatively favorable period for the farm sections of the country.

The price that will give the farmer the pre-war purchasing power, as it is frequently expressed, is what is known as parity price. Thus, if the prices of goods the farmer buys rise above the pre-war level, the prices of the things he sells must rise equally to give him the same purchasing power. The five crops of sugar cane grown from 1909 to 1913, inclusive, brought the producer an average of $3.73 a ton. At the present time, the prices of the goods bought by farmers are about 35 per cent higher, on the average, than they were from 1909 to 1913. This means that a ton of cane also must sell for 35 per cent more for the farmer to be able to buy the same goods with the proceeds that he did before the war. The parity price for Louisiana sugar cane, therefore, is now 35 per cent above the 1909 to 1913 average, or $5.03 a ton. Parity prices for other recent periods were as follows:

| Period | Index numbers of prices paid by farmers, including taxes and interest | Parity price for Louisiana sugar cane |
|---|---|---|
| | 1910 — 1914 = 100 | Dollars per ton |
| 1909-10 to 1913-14 base period average | 100 | 3.73 |
| 1937 | 134 | 5.00 |
| 1938 | 128 | 4.77 |
| 1939 | 127 | 4.74 |
| 1940 | 128 | 4.77 |
| Average | 129 | 4.82 |
| August 15, 1941 | 135 | 5.03 |

Parity prices are more or less a standard by which it may be ascertained if the farmer is receiving a fair return for his crop. It is enlightening to compare the grower's returns under the Sugar Act of 1937 with the parity prices computed above by the official formula.

### Cane Prices Below Parity

Under the sugar control law, part of the producer's return from sugar is taken out in the form of a tax. This is refunded, however, if the grower can prove, to the satisfaction of the Secretary of Agriculture, that he has controlled his production, paid the minimum wages, and followed costly farming practices and regulations. These refunds, conditional payments as they are officially known, comprise part of the grower's return and usually are included in making comparisons between parity and the price actually received by growers.

Farm prices for Louisiana cane, as estimated by the U. S. Department of Agriculture, the average refund payment, and the percentage of the parity

price received each of the past four years is as follows:

| Year | Payment received from processor | Refund payment | Total return | Percentage of parity |
|---|---|---|---|---|
| | Dollars per ton | Dollars per ton | Dollars per ton | Per cent |
| 1937 | 2.91 | 0.93 | 3.84 | 77 |
| 1938 | 2.65 | 0.93 | 3.58 | 75 |
| 1939 | 2.88 | 0.96 | 3.84 | 81 |
| 1940 | 2.78 | 0.96* | 3.74 | 78 |
| Average | 2.80 | 0.95 | 3.75 | 78 |

*Includes payments on cane produced only. Deficiency payments omitted.

By changing the consumption estimate and the quantity of sugar marketed, the Secretary of Agriculture has been able to maintain almost any price for sugar he desired. Nevertheless, prices have been maintained at levels that gave the grower only 78 per cent of the official parity for his cane.

## Parity Makes No Allowance for Sugar in Cane

The grower of cane sells his product on the basis of the sugar it contains, not the tons of cane produced. Rich cane brings more than cane of low sucrose. Nevertheless, the official method of computing parity makes no allowance for the increase in the sucrose content of cane resulting from improvement in varieties and cultural practices.

Approximately 140 pounds of 96 degree sugar was extracted from a ton of cane from 1909 to 1913. During the past four years, a ton of cane has yielded 163 pounds of sugar. Under the present parity concept, the grower is expected to sell a ton of cane with 163 pounds of sugar for no greater return than he formerly received for cane with 140 pounds of sugar. Obviously something is wrong with the method of computing parity prices for sugar crops.

## Necessary to Correct Parity for Improved Cane

If parity prices are to provide a standard by which to evaluate the reasonableness of returns to growers, they must be corrected to allow for the improvement in cane varieties. The producer grows better cane than he did before the first world war, so that a ton of the new cane is worth more than one of the old. Consequently, the grower is entitled to some reward for this improvement.

There are two ways in which allowance could be made for the higher sugar yields in computing parity prices. The easiest and most simple would be to base parity prices on raw sugar instead of cane. This basis for computing parity has advantages over the other because of the availability of price data and the simplicity of the method. Parity prices for Louisiana sugar computed on this basis for recent periods would be as follows:

| Period | Prices for goods farmers buy | Parity price for Louisiana raw sugar | Producer's return from raw sugar | | | Percentage of parity received |
|---|---|---|---|---|---|---|
| | | | Price on New Orleans Exchange | Average refund payment | Total return | |
| | 1910-14=100 | Cents per pound | Cents per pound | Cents per pound | Cents per pound | Per cent |
| 1909-10 to 1913-14 base period ave. | 100 | 3.93 | 3.93 | --------- | 3.93 | 100 |
| 1937 | 134 | 5.27 | 3.19 | 0.54 | 3.73 | 71 |
| 1938 | 128 | 5.03 | 2.82 | 0.56 | 3.38 | 67 |
| 1939 | 127 | 4.99 | 2.92 | 0.56 | 3.48 | 70 |
| 1940 | 128 | 5.03 | 2.97 | 0.59* | 3.56 | 71 |
| Average | 129 | 5.08 | 2.97 | 0.56 | 3.53 | 70 |
| Aug. 15, 1941 | 135 | 5.23 | 3.50** | 0.56 | 4.06 | 78 |

*Includes payments on cane produced only. Deficiency payments omitted.
**Ceiling price.

The use of raw sugar prices instead of cane prices would allow for the change in the sugar content of Louisiana cane and provide a fair standard by which to evaluate prices.

The second method of allowing for the change in the character of cane would be to adjust parity prices so that they would reflect the increase in sugar content. If a crop of cane yielded 20 per cent more sugar than was obtained before the world war, parity prices should be adjusted upward by this ratio. This could be done as follows:

| Period | Pounds of sugar made per ton of cane | Ratio to 1909-13 average | Parity price computed by official method | Parity price adjusted for higher sugar yield | Total returns, including payments | Percentage of adjusted parity received |
|---|---|---|---|---|---|---|
| | Pounds | | Dollars per ton | Dollars per ton | Dollars per ton | Per cent |
| 1909-10 to 1913-14 base period ave. | 140 | 1.00 | 3.73 | 3.73 | 3.73 | 100 |
| 1937 | 154 | 1.10 | 5.00 | 5.50 | 3.84 | 70 |
| 1938 | 168 | 1.20 | 4.77 | 5.72 | 3.58 | 63 |
| 1939 | 171 | 1.22 | 4.74 | 5.78 | 3.84 | 66 |
| 1940 | 161 | 1.15 | 4.77 | 5.49 | 3.74 | 68 |
| Average | 163 | 1.17 | 4.82 | 5.62 | 3.75 | 67 |

The parity price obtained by either of these methods makes adequate adjustment for the higher sugar content.

## Parity Price Has New Importance Under Emergency Price Control Proposals

The parity price concept has taken on new importance in recent months. The shortage of materials resulting from the defense program has caused prices for many goods to soar. To combat this inflationary tendency, the Administration in Washington has undertaken to set price ceilings. Although the authority for this is limited and may be questionable, a bill was introduced in Congress recently broadening this authority. Under this bill, no price ceiling could be placed on agricultural commodities when the price was less than 110 per cent of parity.

The truth is that the ceiling price of 3.5 cents a pound already established for duty-paid raw sugar will result in cane prices considerably below parity, even when computed by the present method which makes no allowance for increased sugar content. The ability of the grower to get a fair return for his cane in the future probably will depend to a large extent upon the method by which parity prices are computed.

---

# Home Made Cannery Raises Living Standards for Smithfield Workers

*(By Edythe Abbott)*

A home-made cannery for home grown products is the result of a plan to raise the standard of living and better the health of workers on Smithfield Plantation at Chamberlin, La.

F. Evans Farwell, Vice President of Milliken & Farwell, Inc. owners of the three thousand acre sugar plantation, hit upon the idea of a plantation cannery in which foodstuffs for all families would be canned at cost price and home-grown produce would be

canned for use in the factory boarding-house. In this way, the families would be encouraged to grow enough vegetables for their own use and thus, by not having to buy as much throughout the year, save money.

### Second Hand Materials

The cannery itself is made of materials that were discarded from the sugar mill close-by. The beams and rafters are old boiler tubes that have been welded together and sheet has been fastened to them with long lead-headed roofing nails which are wrapped around the pipes and twisted. The walls and roof are tin, and there is a six-inch cement floor. The one large room is 30 feet wide and 35 feet long and a 10 foot screened porch across the front provides a cool place for sorting the vegetables and fruits.

Long wooden tables with built-up sides have been made for the sorting of the products to be canned. From these, they are taken to the vats for washing. These vats were once sugar cars from which the wheels have been removed and legs welded on in their place. Sugar cars on wheels also serve to carry the cans after they have been taken from the pressure cooker. Both the pressure cooker and the exhauster are made from the shell of an old juice heater. After the cans are filled, they are packed into round iron baskets (which were welded by the workers) and lowered into the cooker by a pulley attached to a rafter. A heavy metal top closes the cooker by a pulley attached to a rafter, and hot water from a heater made of an old oil drum processes the canned goods. The cooker will hold 600 No. 3 cans and about 221 No. 10 cans.

### Agents Cooperate

L. C. Bourgeois, Jr., the manager, a graduate of the Louisiana State University, consulted the West Baton Rouge Parish Agent, A. E. Camus, and the Home Demonstration Agent, Miss Beatrice Broussard, in planning this project. When the canning is in progress, Miss Broussard is there to help and direct the workers who are under the supervision of Mrs. J. R. Sampson, wife of the assistant superintendent of Smithfield Factory.

All of the labor used in building the cannery and in canning the foodstuffs is from the Plantation itself. During the canning days, about 12 women and two or three men are needed to do the work.

At present, a total of 4536 cans of vegetables and fruits have been canned for the plantation families and the factory boarding house, and all products except fruit were grown there. 1,821 No. 3 cans of corn, 179 No. 3 cans of corn and tomatoes, 527 No. 3 cans of crowder peas, 165 No. 3 cans of okra and tomatoes, 293 No. 10 cans of string beans, 126 No. 3 cans of string beans, 242 No. 10 cans of beets, 165 No. 10 cans of okra, 521 No. 10 cans of tomatoes, 137 No. 3 cans of tomatoes, and 360 No. 10 cans of peaches are the result of the first efforts of the cannery.

The total cost of canning all these products, including field costs of growing and harvesting, depreciation on building and equipment, and the purchase price of the peaches was $838.38.

### Fills Great Need

In the first year, the cannery is filling a great need, Mr. Bourgeois says, and he hopes that next year will find the cannery an accepted establishment on the plantation. He is urging the individual families to increase the amount of food-stuffs grown and to benefit by the cannery.

A relatively new project, it bids fair to raise the standards of living among the plantation workers and at the same time reduce the cost of living, to say nothing of the benefits derived from better balanced diet throughout the year. There is a possibility that the project will broaden out to a community canning establishment.—*West Side Journal, Port Allen, La. Friday, Aug. 24, 1941.*

---

# Molasses Freight Rates

*Appearance of American Sugar Cane League at Hearing Held Before ICC Examiner H. W. Johnson, at Jung Hotel, September 22, 1941, Relative to Railroad Rates on Blackstrap Molasses.*

C. W. Peterman, Manager, Harry L. Laws & Company, Inc., (producers and brokers) also member Freight Rate Committee of The American Sugar Cane League, an association maintained by the Louisiana sugar industry:

My firm in addition to marketing Blackstrap from two factories we own and control, is sales representative of ten other Louisiana mills under which agreement we sell and distribute the molasses produced at these plants. We also handle large quantities of this product each season from Louisiana mills outside our immediate group. All sales are made f.o.b. shipping point.

Louisiana Blackstrap is sold in direct competition with Imported Molasses to Mixed Feed, Vinegar and Yeast Manufacturers, also distillers, of which there are a number of large and important buyers at the points involved. Any preferential treatment accorded the imported product in the way of special rates to large consuming markets gives Imported Blackstrap an unfair advantage in those markets. With the production of Louisiana Blackstrap in normal seasons running around thirty million gallons, distribution is a problem and to dispose of this gallonage in an orderly manner all markets served by this port and other shipping points in this section should also be open on an equal basis to Louisiana Molasses produced west of the Mississippi River. The territory to which these special rates apply, and to which our Louisiana Molasses is now shut out, included the most important consuming markets served by this section. During seasons prior to the time these special rates were put into effect a large gallonage of Louisiana Blackstrap moved to these markets each year direct from west side Louisiana producing points.

The production of Blackstrap Molasses in Louisiana at fifty-eight mills of which fifty-four are located west of the river for the five years, 1936 to 1940 inclusive, was as follows:

1936–27,700,000 Gals.–equal to 3,462 tank cars 8000 Gals.
1937–29,900,000 Gals.–equal to 3,738 tank cars 8,000 Gals.
1938–35,000,000 Gals.–equal to 4,375 tank cars 8,000 Gals.
1939–27,900,000 Gals.–equal to 3,487 tank cars 8,000 Gals.
1940–15,400,000 Gals.–equal to 1,925 tank cars 8.000 Gals. (Crop failure).

At least 90 per cent of the Blackstrap produced in the Louisiana Cane Belt comes from mills located west of the Mississippi River.

During the aforementioned period sales made by

Harry L. Laws & Company, Inc. were as follows:

1936–10,000,000 Gals.–equal to 1,250 tank cars 8,000 Gals.
1837– 9,824,000 Gals.–equal to 1,228 tank cars 8,000 Gals.
1838–13,864,000 Gals.–equal to 1,733 tank cars 8,000 Gals.
1939–12,176,000 Gals.–equal to 1,522 tank cars 8,000 Gals.
1940– 8,944,000 Gals.–equal to 1,118 tank cars 8,000 Gals.

During this same period our shipments direct from Louisiana origins to the territory involved were as follows:

1936–196 tank cars– 16% of total sales
1937–178 tank cars– 14% of total sales
1938–193 tank cars– 11% of total sales
1939–202 tank cars– 13% of total sales
1940– 18 tank cars–.016% of total sales

We have not shipped a single car into this territory since September, 1940.

Prices obtained by us during the five year period were as follows:

| | High | Low |
|---|---|---|
| 1936 | 7c | 5½c |
| 1837 | 7c | 5c |
| 1938 | 3½c | 2½c |
| 1939 | 4½c | 3½c |
| 1940 | 6c | 5c |

The twelve mills in our group all located west of the Mississippi River produce approximately 20 per cent of all the Blackstrap made in the Louisiana Cane Belt. Several of these factories are located directly on the west bank of the Mississippi River and others on interior navigable waterways. Most of these plants have pipe lines to the water's edge of the respective streams serving them through which they have for a long string of years received water delivery of their fuel oil. Therefore, these points are just as much potential water competitive origins as some of the points from which these special rates now apply. The installation of additional pipe lines for handling molasses would not involve any great expense and had normal conditions continued since September, 1939, several of these factories would have installed pipe lines for handling molasses by water.

The importance of all large consuming markets being open to our product from west side origins can be demonstrated by a single condition we faced in 1938. With a record production of Blackstrap to be marketed and a large portion to be moved in a short period, the large buyers who normally operate in this market withdrew altogether. The sale of some five hundred odd cars to an important St. Louis buyer broke this deadlock and saved producers tens of thousands of dollars on the balance of their molasses.

Louisiana producers are not seeking any advantage for their Blackstrap Molasses but it is imperatively necessary in the interest of both the industry and the railroads serving these Louisiana factories that they do not be penalized in favor of a competitive product. Further, for carriers to continue to handle this tonnage, west side origins must be on the same basis as New Orleans and other east side origins, otherwise an important gallonage of this molasses will in normal year move to New Orleans distillers by water.

Squier Sugar Machinery

MILLS and CRUSHERS
AIR-DRAULIC ACCUMULATORS
JUICE HEATERS
EVAPORATORS, CAST IRON AND WELDED PLATE
PANS, CAST IRON AND WELDED PLATE
CRYSTALLIZERS
HIGH SPEED CENTRIFUGALS
SUGAR DRYERS
PUMPS AND FANS
COMPLETE SUGAR FACTORIES

The Geo. L. Squier Mfg. Co
462 Broadway Buffalo, N. Y.

BE SURE WITH PURE
By Using
Pure-Pep Gasoline Tiolene Motor Oil
Yale Tires

THE PURE OIL COMPANY
District Office: Abbeville, La.

FOR SALE
STRICTLY #1 Second Hand Selected, thoroughly mended Blue Stripe Cuban RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

LAMBORN & COMPANY, INC.
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

LE BOURGEOIS BROKERAGE CO.
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
HARRY L. LAWS & CO., INC.
Brokers and Distributors
SUGAR and MOLASSES
SUGAR FUTURES
American Bank Building New Orleans, La.

GAY, SULLIVAN & CO., INC.
SUGAR
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

STAUFFER, ESHLEMAN & CO., LTD.
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline
Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
CYANAMID
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

INDUSTRIAL LUBRICANTS

BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
STANDARD OIL CO. OF LA.

FOR SUGAR CANE FINANCING
STATE AGRICULTURAL CREDIT CORPORATION, INC.
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

AMERICAN MOLASSES CO.
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LEGardeur Frank Youngman
R. J. LEGARDEUR & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

PENICK & FORD, LTD., INCORPORATED
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

STANDARD SUPPLY AND
HARDWARE CO., INC.
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

E. A. RAINOLD, INC.
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

We stand for the encouragement of Home Industries as against foreign Competition

Vol. 20 NEW ORLEANS, LA., OCTOBER 15, 1941 No. 2

# Washington News

(*By C. J. Bourg*)

The following memorandum was submitted by the Committee of the American Sugar Cane League to Mr. Leon Henderson and his staff, subsequent to a conference on the price ceiling established on raw sugar.

In connection with the discussions held between the committee of sugarcane producers from Louisiana and the members of the staff of OPA on September 30th, the following memorandum is submitted on behalf of the producers:

The principle of parity, as applied to prices received by farmers for agricultural commodities, has been adopted as a general policy of Congress and of the Federal Government. This principle is recognized specifically in H.R. 5479, which is a Price-Control Bill proposed by the Administration. Section 3 provides that no ceiling shall be establshed for any agricultural commodity below 110% of the parity price. All of the witnesses representing the Administration who have appeared before the Banking and Currency Committee on the Bill, including the Administrator of OPA and members of the President's Cabinet, have endorsed the concept of parity for agricultural commodities.

The purpose of fixing a price ceiling on a commodity is one to prevent trends towards inflation and to protect the consumer. The 3.50c ceiling price on raw sugar does not give parity on raw sugar or on sugarcane. The ceiling was established at a time when the price of raw sugar was barely 20% above the average price of raw sugar for several years. The market price was 3.80c and the average price has been declared to have been 3.16c. The 3.50c price is just above 10% of such average market price. Certainly a 10% or 20% increase in the price of any commodity under existing circumstances and general rising costs and prices cannot be said to denote a dangerous trend towards inflation. Other foods have admittedly doubled and tripled in price. The consumer is even today paying less for his sugar than the average price of any period prior to 1932. Sugar remains a cheap food by all standards. The attention of OPA is requested to a full consideration of retail prices for sugar and particularly to the fact that, although the price of raw sugar was reduced 30 points below the current market price, the price of refined sugar has been reduced only 10 points below the current market. The consumer pays on the basis of the wholesale refined price.

Accepting the declared and established policy of the Federal Government on parity for agricultural farm products, it is submitted that the most effective and constructive correction which could be made with regard to the raw sugar ceiling price would be to adjust the ceiling so that farmers who produce sugarcane and sugar beets would receive at least parity. Such a ceiling would not result in a price which could even remotely be considered inflationary and would represent, at most, only a fractional price advance to the consumer which would still be well below the percentage of price advances in other foods. We merely ask for the recognition of our farm product in the application of the parity concept to all agricultural commodities.

Should OPA continue to insist upon maintaining the price ceiling as established at 3.50c for raw sugar, then the only practical plan by which sugar farmers will receive parity for their product is the proposal submitted in writing to Mr. Henderson by Congressman Hale Boggs, dated September 25th. This plan suggests an amendment to the Sugar Act.

Recognizing further the desire of OPA to main-

THE
SUGAR BULLETIN
414 Whitney Bldg., New Orleans
Marcel J. Voorhies, Editor
Issued on the 1st and 15th of each month. Official Organ of the
American Sugar Cane League of the U. S. A.,
in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn
Subscription Price, 50 Cents per Year

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE

President, W. C. Kemper, Franklin, La.

1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

EXECUTIVE COMMITTEE

W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

tain price levels as far as possible, there is an alternative, based upon the actual situation, which would require the least change. On August 12th, when a price ceiling was announced on raw sugar at 3.50c, the market was 3.80c; and, therefore, the ceiling reduced the current market by 30 points. The announced market price on refined sugar on the same day was 5.35c, and it remained at that level until September 12th. It is understood that there were contracts for raw sugar bought above 3.50c prior to August 12th which were being delivered and which had to be liquidated at the contract price; but so far the price of refined sugar has been reduced only 10 points to 5.25c, although the raw sugar price has been reduced 30 points. It is an accepted fact that practically every pound of raw sugar which has been delivered since August 12th has commanded a price above 3.50c, and the only raw sugar in volume yet to be contracted for in 1941 is the Louisiana raw sugar crop. The price to the consumer of sugar at retail follows more directly the refined price, and this level is apparently satisfactory from the standpoint of the consumer. Consequently, we have price levels today, whereby the retail price to the consumer, the wholesale price for refined cane sugar, the wholesale price for refined beet sugar, and the price for sugar beets are established on the basis of 5.25c refined at New York. Since this price basis represents a reduction of only 10 points under the comparable price on August 12th, a readjustment in prices could result fairly to all persons engaged in the production of sugar by changing only the price of raw sugar and leaving all other price margins at the levels which exist today. This proposal has the attractive advantage of maintaining what are apparently considered satisfactory price relationships and of granting relief where it is admittedly needed and merited.

The disparity between the percentage of parity received by sugarcane growers as compared to sugar beet growers is a difficult problem which ought to be corrected. The simple act of raising the raw sugar ceiling to its proper relationship with other prices, and particularly the price of refined cane sugar, would bring about an improvement at a time when it can be effectual and extend relief on the sugarcane crop about to be harvested.

Finally, the attention of OPA is invited to the peculiar situation wherein the sugarcane growers must have relief on the 1941 crop immediately, or they will be deprived of the same advantages already enjoyed by other areas on the 1941 crop and further deprived of any advances in price until the 1942 crop is harvested one year hence.

## United States Department of Agriculture, Agricultural Adjustment Administration

An open meeting on fair and reasonable prices for the 1941 crop of Louisiana sugarcane, presided over by officials of the Sugar Division of the Agricultural Adjustment Administration, will be held in the courthouse in Donaldsonville, Louisiana on Thursday, October 9, 1941 at 2:00 p.m.

Since the fair price hearings were held in June, 1941, a change in circumstances has occurred which, the Sugar Division feels, seems to warrant a conference with interested parties on the problem of fair and reasonable prices for the 1941 crop prior to issuance of the determination.

In addition to a substantial increase in the price of raw sugar, a significant increase in the price of molasses has occurred in recent months. The consensus of opinion at the fair price hearings held in June was that the purchase agreements in effect during the previous year should be continued in 1941. However, if such were the case, the grower would not participate in this increase from the average price of molasses prevailing for the last three years.

In view of these circumstances, the Sugar Division is considering a recommendation that the 1941 determination of fair and reasonable prices to be paid by processors who, as producers, would wish to qualify for conditional payments be changed from the 1940

determination in such a way that in addition to the basic payment provided for, the grower be given one-half of any value of molasses in excess of the average value of such molasses for the past three seasons.

The meeting will afford an opportunity to interested persons to express their views with respect to this proposal and memoranda with respect to the proposal will also be received at the meeting. You are, therefore, urged to notify all interested persons in your parish of the date, time and place of this meeting so that a full attendance may be expected.

## Statement of Growers-Processor Committee Made at Donaldsonville Meeting Called By Sugar Division U.S.D.A. October 9, 1941

My name is W. F. Giles of Adeline, Louisiana. I am a grower of sugar cane, operating in the mainland sugar cane area.

I make this appearance as Chairman and Spokesman of the Louisiana Grower-Processor Committee, a committee composed of seven Louisiana growers and seven Louisiana processors, who were originally selected at state-wide meetings of these two branches of the Louisiana sugar industry. I am a grower member of that committee.

It is and has been the purpose of this committee since its creation and organization several years ago to achieve and maintain a fair and equitable relationship between the Louisiana growers and processors in the purchase of sugar cane, primarily as to a fair price, or an equitable division of the proceeds of a ton of sugar cane. This committee today having no official status in connection with the administration of the Sugar Act of 1937, and consequently no power, can only serve the growers and processors of Louisiana through cooperation with and by recommendations to the Sugar Division of the Department of Agriculture, thereby indicating the views and desires of the sole interested and contracting parties, the growers and processors. Its recommendations should be given great weight.

Prior to the fair price hearing conducted in Louisiana in June of this year by representatives of the Sugar Division, a series of meetings was held by this Grower-Processor Committee. At these meetings both the grower members and processor members fully and freely expressed their views relative to the 1941 fair price determination and other relations between the grower and processor. Many elements affecting a fair and equitable price and relationship were discussed and considered, including the advance in the market price of blackstrap molasses. At that time a market of between nine cents and ten cents per gallon for such blackstrap molasses was available, so I am advised, with a further increase possible. Considering all material and relevant elements, it was unanimously agreed by that committee that no change should be made from the previous determinations in the 1941 fair price determination, and that under facts existing at that time, the fair price basis as previously determined would result in a fair and equitable price in 1941.

As Spokesman and Chairman of the Grower-Processor Committee, I recommended to the Sugar Division and the Secretary of Agriculture at the June hearing held in Donaldsonville, Louisiana, that no change in the fair price determination be made. Based upon statements made at that hearing by representatives of the Sugar Division, it would appear that this view was concurred in by the Sugar Division, despite the then market price of blackstrap molasses. At the three public hearings conducted in Louisiana by the Sugar Division not one grower or processor suggested that any change be made.

The Sugar Division is now considering a recommendation that the 1941 determination of fair and reasonable prices to be paid by processors who, as producers, would wish to qualify for conditional payments, be changed from the 1940 determination in such a way that in addition to the basic payment provided for, the grower be given one-half of any value of blackstrap molasses in excess of the average value for such blackstrap molasses for the past three seasons. This conference has been called in order that the interested parties may express their views relative to the proposed change.

Upon receipt of notice of this conference, a meeting was called and held of the Grower-Processor Committee at Thibodaux, Louisiana, on October 7th, 1941. At this meeting there were present six growers and seven processors, one grower being absent. The recommendation which is being considered by the Sugar Division was discussed and considered as carefully as the limited time would permit. By a vote of eleven to two, two processors dissenting, I have been authorized to express the following views and make the following recommendations.

I have been authorized to point out the following facts at the outset: that as recited above, both the growers and processors in Louisiana, in June of this year, after careful consideration, agreed that in view of many elements affecting an equitable relationship between the grower and processor, including the price of blackstrap molasses, that no change in the fair price determination should be made for the year 1941; that the Sugar Division apparently concurred in this view, and up until a few days ago made no statement or announcement to the contrary; that the sugar cane harvesting and grinding season in Louisiana will commence within the next ten days; that certain processors, prior to any announcement made by the Sugar Division relative to this proposed change, sold the blackstrap molasses to be produced from the 1941 crop at a stipulated price per gallon, based upon the then available market; that many elements should and must be fully considered by the grower and processor before an intelligent conclusion can be reached as to the effect of any change in the price to be paid for sugar cane.

In view of the above facts, and particularly the complete lack of time to now properly evaluate all elements which should go to make up a fair price contract between the growers and processors, the Grower-Processor Committee shows and urges that to suggest and consider at this late date any change in the price to be paid for sugar cane from the 1941

crop is a mistake, is contrary to good policy, and could result in some serious injustice.

Despite the fact that the Growers and Processors of Louisiana have not had the time and opportunity to properly evaluate the effect of an increase in the market price of blackstrap molasses, taken together with other changing elements, in determining a fair and equitable price, it is believed that when the price of blackstrap molasses advances beyond some point, which point I shall later discuss, that the value of such molasses above this point should be shared between the grower and processor.

When the question of fair price was considered in years prior to 1941, and when it was recommended at the June hearing that no change be made in 1941 from the 1940 determination, which recommendation, as I have pointed out, was apparently concurred in by the Sugar Division, it was recognized and contemplated that there were certain variable elements and changing circumstances which could and would affect the relative positions of the grower and processor, and the proportionate share of the ultimate return from the ton of cane which each would receive, some of which would work advantageously to the grower and some to the processor. At the time of the 1941 hearing, the available market for blackstrap molasses, as I have stated, was well in excess of the average price for the preceding several years, and further advance was possible. It was not concluded then by the grower, the processor, nor representatives of the Sugar Division that this variation or increase in price above the average for the three preceding years would justify any change in the Fair Price Determination. The question has again been considered and the conclusion reached that no increase in the price of blackstrap molasses up to ten cents (10c) per gallon would justify any change.

It is therefore recommended that if the increased price of blackstrap molasses is considered by the Secreatry of Agriculture in arriving at a fair price for the 1941 crop of sugar cane, that the determination provide that the grower be paid one-half of the value of such blackstrap molasses when such molasses exceeds the price of ten cents per gallon.

It is further recommended that in order to determine the quantity of blackstrap molasses obtained or obtainable from a ton of sugar cane, upon which quantity settlement shall be effected by the processor with the grower, that there should be used the average recovery of such blackstrap molasses from sugar cane in the State of Louisiana during the preceding three years, provided that in computing such average no weight should be given to blackstrap molasses obtained from frozen cane. In the event such average is not available, then there should be used the average recovery of such blackstrap molasses from the 1941 crop, excluding the quantity of blackstrap molasses obtained from frozen sugar cane.

In determining the average recovery of blackstrap molasses the quantity of such molasses obtained from frozen sugarcane should be excluded for the reason that such molasses from frozen cane is rejectable.

It is further recommended that the price of blackstrap molasses to be used by each processor in determining the grower's share, if any, of the price for such molasses, should be the weighted average received by each such processor for the blackstrap molasses produced and marketed by such processor; or, at the option of the processor, the simple average of the weekly quotations of blackstrap molasses on the Louisaina Sugar & Rice Exchange and the Cane Products Trade Association Exchange for the price fixing period used in determining the average price of sugar.

The first option is recommended for the reason that certain Louisiana processors have, as of this date, sold all, or a considerable portion, of their anticipated production of blackstrap molasses, to be obtained from the 1941 crop at a stipulated price. To require any such processors to settle with his growers on the basis of the average price of all sales made in the state, would work a hardship on such individual processors.

The second option is recommended for the reason there are certain processors that produce no blackstrap molasses and it would, therefore, be impossible to obtain an average price based upon the marketings of blackstrap by these processors.

We respectfully urge that these recommendations, made by a representative body of the Louisiana sugar industry, both growers and processors, be accepted, and in substance incorporated in the Secretary's determination of fair and reasonable prices to be paid for the 1941 crop of sugar cane in the State of Louisiana.

## Lift the Sugar Restriction

We are quoting below an editorial appearing in The Labor Record of August 1941.

"The growing of sugar cane and the production of raw and refined sugar has long been hampered in Louisiana and other states.

With European and Asiatic countries at war today, there will be, without question of doubt an acute sugar shortage which will result in exhorbitant prices and severe rationing.

The Washington powers have long deprived us the right to plant more cane and beets on an increased basis because of the false belief that our "good neighbor" relations will be endangered. We have always been a staunch advocator of the good neighbor policy, but we are staunchly opposed to a sugar curtailment law or price fixing at these times when our every resource should be used to help supply the sugar demands of the United States and our allies.

Sugar has always been one of the vital needs of the American public, and the principal agricultural pursuit of several states. In normal times this community has been one of the largest sellers in the line of food products. At this time when war is spread far and wide, sugar is supplying the energy needed by men on the battlefield and in defense plants. After the war is over the task of feeding the exhausted nations will remain with us, and as usual sugar in great quantities will be needed to supply the demand.

It is high time that Washington realizes our potential resources and give us the green light, to plant and refine to capacity, so that a serious sugar shortage will be averted."

# The Story of Sugarcane and its Improvement

*George Arceneaux, Agronomist, U.S.D.A.*

*(Talk recently made over Radio Station WESG, Ithaca, N. Y.)*

The history of sugarcane through the ages presents a good example of how the luxuries of yesterday become the common commodities—one might even say the necessities—of today, through Science and Industry. We owe the enjoyment of a bountiful and cheap supply of sugar chiefly to the improvement of two plants—sugarcane and sugar beet—and to correlated advances in agriculture and sugar manufacturing. The world is now consuming sugar at the rate of more than 30 million tons a year, three-fourths of which, roughly speaking, comes from sugarcane and most of the remainder from sugar beets.

Cultivated forms of sugarcane, which is a member of that large family of plants known as grasses, are able to accumulate in their bamboo-like stems large quantities of sugar. Mature stalks after having been stripped of the leaves are crushed by means of huge iron rollers and, from the juice thereby extracted, sugar is recovered and refined in the course of a complicated but highly efficient manufacturing process.

The term, sugarcane, in a restricted sense is commonly applied to thick-stemmed forms, otherwise known as "noble" canes, a group to which belonged most of the varieties cultivated during the past. The origin of these "aristocratic" sugarcanes which are characteristically rich in sugar and low in fiber content is not definitely known. If we are to believe Hindu mythology they were sent directly from Heaven by a benevolent god in order to transform one of the favored principalities into an earthly paradise. However, the facts of the situation suggest a much more humble derivation. We have considerable evidence indicating that cultivated forms of sugarcane originated from wild types occurring in various parts of Asia and on certain islands of the Indian and southern Pacific Oceans. Sugarcane was brought to Spain by the Moors in the 8th century A.D. From there its cultivation spread to a number of countries bordering the Mediterranean Sea and became one of the very profitable industries of the Middle Ages. In those days sugar was a very costly commodity, only to be indulged in as a medicine, or as a luxury by the very rich. The European sugar industry of that period existed largely by reason of the exceedingly high prices which the commodity commanded.

On his second voyage to the New World, Columbus brought cuttings of sugarcane to what is now the Island of San Domingo and the eventual result was an extensive sugar industry in the West Indies and other parts of America. Because of natural advantages and increased agricultural efficiency, plantations of the New World produced sugar very cheaply and thus we find it, probably for the first time in history, gradually becoming a food commodity for common, every day consumption.

Sugarcane was brought to Louisiana by Catholic missionaries and there its cultivation reached the order of an important industry some one hundred and twenty-five years ago. From Louisiana, its culture soon spread to neighboring southern states where it has long been the principal source of sirup produced and used in this country; within more recent years a sugar industry of considerable importance and promise has been established in the Everglades section of Florida.

The agricultural importance of the continental sugarcane industry is evidenced by the fact that its principal products—sugar and syrup—have a combined annual value approaching 50 million dollars.

We commonly associate the cultivation of sugarcane with Louisiana and quite properly so because the so-called "sugar bowl" in addition to being the cradle, so to speak, of our domestic sugarcane industry, has been and still is the center of sugarcane production in this country. In this quaint and picturesque bayou country are to be found some of the finest plantation homes of the Old South, many of them dating back a hundred years or more. They bear witness to the success achieved by sugarcane planters of the years long gone by. It is worthy of note, however, that at no time in its history has the Louisiana sugar industry existed by placing sugar on the basis of a luxury. Contrary to a common misconception, the domestic sugar industry is not and never has been subsidized out of proportion to the protection ordinarily afforded sugar production in other countries. We enjoy today, and have quite consistently enjoyed in the past, a retail price on sugar among the lowest in the world. In several of the large European countries, even under normal conditions, sugar costs as much as from 3 to 5 times what it does in the United States. More than one hundred years ago, Louisiana sugarcane growers were supplying your ancestors with sugar retailing at a price usually ranging from 5 to 9 cents a pound, which was apparently well within the reach of frontier pocketbooks. At that time Louisiana was producing more than one-third of the sugar consumed in this country. That the industry there, has managed to survive its many vicissitudes and even major calamities is doubtless due more to existing natural advantages and the plain pluck of sugar planters than to any undue pampering of the industry by the national Government.

But after having weathered floods, hurricanes and other catastrophies, Louisiana sugarcane growers were finally faced with a situation which really threatened the existence of their industry. About twenty years ago the dread mosaic disease swept across the sugar belt like wild fire and bewildered growers saw the foliage of varieties which had nobly performed for a century gradually change from dark green to a sickly greenish yellow. Cane yields dropped from year to year in spite of all that growers could do. Sugarcane culture as a business risk was finally forsaken by banks and other lending institutions and as a result many plantations went out of cultivation for lack of operating funds.

Anticipating the eventual outcome of the mosaic epidemic in Louisiana the United States Department of Agriculture had earlier launched a breeding program directed toward the production of disease-resistant varieties. Drawing on the great diversity of plant types with which cultivated varieties of

BE SURE WITH PURE
By Using
Pure-Pep Gasoline Tiolene Motor Oil
Yale Tires
THE PURE OIL COMPANY
District Office: Abbeville, La.

PAUL, RICE & LEVY
INCORPORATED
Wholesale
INDUSTRIAL, MILL & MARINE SUPPLIES
Day, Ra. 6123 Night, Fr. 2019
501-505 Poydras St.
New Orleans, - - La.
BETHLEHEM WIRE ROPE
O I C VALVES
GUILD & GARRISON PUMPS
INTERNATIONAL INDUSTRIAL PAINTS
CHESTERTON PACKING
K-TING MANILA ROPE
CONSOL OILS
VULCAN SOOT BLOWERS

sugarcane will cross, the Department had already assembled in greenhouses at Washington much of the needed material. The collection fortunately included a few hybrid varieties of mixed tropical and temperate zone origin which, while not entirely resistant to mosaic, proved fairly tolerant of the disease. The small supply of seed material of these varieties was rapidly increased and enabled the Louisiana industry to survive until more suitable varieties could be produced.

In commercial culture sugarcane is propagated vegetatively, but under properly controlled conditions it can be grown from seed. It requires from 14 to 16 months to reach the flowering stage and will seed only under tropical or nearly tropical conditions. Thus sugarcane breeding can be conducted at only a few localities in the continental United States.

Canal Point, Florida, situated on the shore of Lake Okeechobee and enjoying almost complete protection from freezing temperatures has been the center of sugarcane breeding activities of the Department of Agriculture in the U.S.A.

Thousands of sugarcane seedlings are produced annually and these are tested in Louisiana, Florida, and the principal sirup-producing regions of the South. Such of these as ultimately prove adaptable are released to growers for commercial culture.

So far, 8 varieties have been released. These, together with two others imported from foreign countries, are now being planted exclusively in Louisiana, and, in spite of prevailng diseases, are producing more sugar per acre than was ever produced by the now discarded varieties. Thus these improved varieties have not only made possible the complete rehabilitation of the Louisiana sugarcane industry, but have in addition placed agricultural production on a much more secure footing than it had been at any previous time.

As an essential phase of its sugarcane breeding program, the United States Department of Agriculture has literally combed the world for wild and cultivated forms of sugarcane. Employees of the Division of Sugar Plant Investigations have made a number of collecting expeditions to remote corners of the world in search of plant types to be used in breeding work. In a very interesting article published in the September, 1929 issue of the National Geographic Magazine, experiences on one of the collecting trips among head hunters of the interior and hitherto unexplored parts of New Guinea are graphically recorded. Incidentally, one of the finds of that

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

particular expedition was an entirely new species, the discovery of which has shed much light on the probable origin of cultivated varieties of sugarcane.

Of particular interest among the sugarcanes assembled as a result of this world-wide search are wild Central Asiatic varieties which, in contrast with tropical ones, are able to withstand relatively low temperatures. These in common with other wild canes are worthless for sugar production and whether or not their ability to resist cold can be bred into satisfactory types of cane remains to be seen. However, the possibilities involved are so great that the problems presented become a real challenge to the plant breeder. Thus far, he has succeeded in his battle against disease and by fighting hard he saved the industry. With the new and promising material lately come to hand, there is reason to think that advances in other directions and of still greater magnitude can and will be made.

## Gilmore's Louisiana Sugar Manual

We are in receipt of the 1940-41 Edition of Gilmore's Louisiana Sugar Manual, a standard authority on Louisiana sugar production. Mr. Gilmore's Manual has been published since 1907, and the present edition is the handsomest, largest and most complete of the series.

In addition to giving comprehensive details concerning each sugar producing unit in Louisiana the Manual contains the names and addresses of all the planters in Louisiana who grow sugarcane to the extent of 500 tons per season and upward.

The areas cultivated are also shown and, in the case of the 74 active factories a summary of the equipment of each is printed, with the names and addresses of the officers and the purchasing agents. At the back of the Manual a large map of the Louisiana sugar district is inserted, on which the location of each factory is marked and on the back of the map is printed the shipping directions by express, railroad freight and water routes, as well as by truck.

Mr. A. B. Gilmore, the publisher, whose office is in the Queen & Crescent Building in New Orleans, deserves congratulations on the thoroughness and completeness with which he has prepared this Louisiana Sugar Manual which sells for $5.00 per copy.

**STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACTS OF CONGRESS OF AUGUST 24, 1912, AND MARCH 3, 1933.**

Of The Sugar Bulletin, published semi-monthly at New Orleans, La., for October 1, 1941. State of Louisiana, Parish of Orleans.

Before me, a Notary Public in and for the State and parish aforesaid, personally appeared Marcel J. Voorhies, who, having been duly sworn according to law, deposes and says that he is the Editor of the Sugar Bulletin and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations, printed on the reverse of this form, to-wit.

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, The American Sugar Cane League of the U. S. A., Inc., New Orleans, La.; Editor, Marcel J. Voorhies, New Orleans, La.; Managing Editor, none; Business Managers, None.

2. That the owner is The American Sugar Cane League of the U. S. A., Inc., New Orleans, La.; W. C. Kemper, Franklin, La., President; John J. Shaffer, Jr., Houma, La., Vice-President; Frank L. Barker, Lockport, La., Treasurer; Reginald Dykers, New Orleans, La., Secretary.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are none.

MARCEL J. VOORHIES.
Editor.

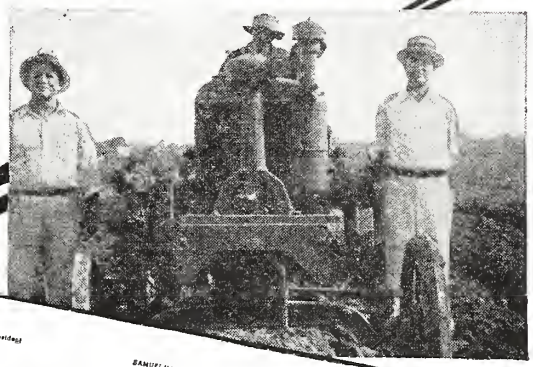
Sworn to and subscribed before me this 26th day of September, 1941.

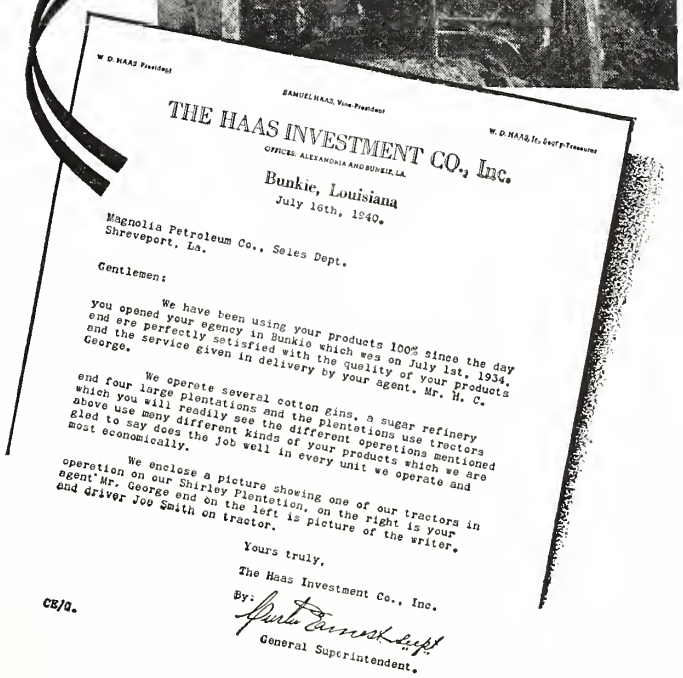
ARTHUR A. DE LA HOUSSAYE,
Notary Public.

(Seal)

(My commission expires at death.)


Read what this BIG operator says about MAGNOLIA PRODUCTS





W. D. HAAS, President SAMUEL HAAS, Vice-President W. D. HAAS, Jr., Sec'y-Treasurer

THE HAAS INVESTMENT CO., Inc.
OFFICES: ALEXANDRIA AND BUNKIE, LA.

Bunkie, Louisiana
July 16th, 1940.

Magnolia Petroleum Co., Sales Dept.
Shreveport, La.

Gentlemen:

We have been using your products 100% since the day you opened your agency in Bunkie which was on July 1st, 1934, and are perfectly satisfied with the quality of your products and the service given in delivery by your agent, Mr. H. C. George.

We operate several cotton gins, a sugar refinery and four large plantations and the plantations use tractors which you will readily see the different operations mentioned above use many different kinds of your products which we are glad to say does the job well in every unit we operate and most economically.

We enclose a picture showing one of our tractors in operation on our Shirley Plantation, on the right is your agent Mr. George and on the left is picture of the writer, and driver Joe Smith on tractor.

Yours truly,
The Haas Investment Co., Inc.
By: [signature]
General Superintendent.

CE/a.

When operations are done on as large a scale as those of The Haas Investment Company there is no room for products that do not do their work 100 per cent. The fact that Magnolia Products have been used exclusively by Mr. Earnest since 1934 is a record that proves the outstanding performance qualities of these famous products. If you are not absolutely satisfied that you are getting maximum operating economy from your farm machinery, talk to your local Magnolia Agent before buying tractor lubricants or fuel again.

The statements in the letter above were voluntary, and no compensation of any description was given to Mr. Earnest.

MF-906

MAGNOLIA AGENTS

A SOCONY-VACUUM COMPANY

Offer immediate delivery of tractor lubricants and fuels

MAGNOLIA PETROLEUM COMPANY

**LAMBORN & COMPANY, INC.**
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

**LE BOURGEOIS BROKERAGE CO.**
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
**HARRY L. LAWS & CO., INC.**
Brokers and Distributors
SUGAR and MOLASSES
**SUGAR FUTURES**
American Bank Building New Orleans, La.

**GAY, SULLIVAN & CO., INC.**
SUGAR
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

**STAUFFER, ESHLEMAN & CO., LTD.**
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
**CYANAMID**
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

**INDUSTRIAL LUBRICANTS**

BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
**STANDARD OIL CO. OF LA.**

FOR SUGAR CANE FINANCING
STATE AGRICULTURAL CREDIT CORPORATION, INC.
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

**AMERICAN MOLASSES CO.**
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LEGardeur Frank Youngman
**R. J. LEGARDEUR & COMPANY**
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

**PENICK & FORD, LTD., INCORPORATED**
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

**STANDARD SUPPLY AND HARDWARE CO., INC.**
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

**E. A. RAINOLD, INC.**
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

Chemistry Library,
Louisiana State University,
University, La.

THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

We stand for the encouragement of Home Industries as against foreign Competition

Vol. 20 NEW ORLEANS, LA., NOVEMBER 1, 1941 No. 3

# Parity and Sugar

*(By C. J. Bourg)*

Dr. Howard R. Tolley, Chief of the Bureau of Agricultural Economics, Department of Agriculture, appeared before the House Banking and Currency Committee Hearings on the Price-Control Bill for the purpose of explaining the provisions referring to parity. Congressman Hale Boggs of the Second Louisiana District questioned Dr. Tolley with regard to the application of parity to sugar.

Instead of trying to place our interpretations upon the answers of Dr. Tolley, and in view of the enlightening nature of the dialogue, excerpts from the record of the Hearings are presented below, so that our members may enjoy the full significance of this discussion of policy which so intimately affects the welfare and future of sugarcane growers and sugar producers in Louisiana:

Mr. Boggs: Dr. Tolley, on yesterday the Secretary testified that he believes in the principle enunciated in this bill, of 110 percent of parity, stating that he favored the 110-percent principle on the theory that it would work out an average of parity throughout the year. Are you in accordance with his expression?

Dr. Tolley: Naturally, yes.

Mr. Boggs: Do you feel that that same principle should apply to all agricultural products?

Dr. Tolley: With the possible variation, as suggested yesterday, that it be 110 percent of parity, or July 29, 1941, whichever is higher; possibly with a variance of that kind, but in general, 110 percent of parity.

Mr. Boggs: But fundamentally you believe that the principle of 110-percent parity should apply to all agricultural prices? As a ceiling?

Dr. Tolley: That is right.

Mr. Boggs: The Secretary also testified yesterday that farm prices over the period of the last 20 years had been, using his own language, bargain prices.

Dr. Tolley, I believe for all prices of farm commodities that there has probably been a less increase in the cost of sugar to the consumer than possibly any other commodity or commodities in this country. But despite that fact it is the only major commodity on which a ceiling has been placed, and I just want to talk about this question of a ceiling on sugar a little bit.

And I want to have some understanding about this ceiling before this committee goes into executive session to consider this bill, because if we are going to have 110 percent of parity as a principle I want it understood by this committee that the 110 percent of parity is going to apply to all commodities, or the alternative of July 29, whichever is higher, and that the grower or producer of certain commodities is not going to be placed in the position where he is not going to have a chance in the world to come out.

Now yesterday we talked for just a few minutes about the present ceiling which has been placed on raw sugar. Do you know what the relationship that ceiling has to parity, to sugarcane, and to sugar beets?

Dr. Tolley: Of course, the parity is on the raw sugar; three and one-half cents, I believe, is the figure. Your question is what return would a producer get in relation to parity if he used that as the price of raw sugar.

Mr. Boggs: Yes.

Dr. Tolley: There is one character of contract, the usual contract between the sugarcane grower and the processor, that is a sort of profit-sharing contract as we look at it; if the price of sugar goes up the pro-

THE SUGAR BULLETIN

414 Whitney Bldg., New Orleans

Marcel J. Voorhies, Editor

Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated The Louisiana Sugar Planters' Assn. The American Cane Growers' Assn. The Producers & Mfrs. Protective Assn. Subscription Price, 50 Cents per Year.

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE

President, W. C. Kemper, Franklin, La.

1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

EXECUTIVE COMMITTEE

W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

ducer gets a higher price for his cane; if the price of sugar goes down the producer gets a lower price for his cane. I believe the standard contract in the continental cane area would indicate the price of sugarcane now would be $3.50 per ton, or equal to 100 pounds of sugar in a ton of cane.

Mr. Boggs: Yes.

Dr. Tolley: With a ton of cane, Louisiana cane, say, averaging 160 pounds of sugar—well, it works out that the published parity price of continental sugarcane as of September 15 was $5.11 per ton; the published parity price of sugarcane is $5.11 per ton.

Mr. Boggs: Has the index gone up since then?

Dr. Tolley: It is not available; that is the latest figure we have. We will know within a few days whether the index has gone up since; it may have gone up one or two points since that time, but we will know in a few days.

So that with sugar prices as they are now apparently the contract will be something like $3.50 per ton for cane.

The continental payment made under the Sugar Act is 60 cents per 100 pounds of sugar, and that averages out about another dollar per ton for cane.

Mr. Boggs: I believe it is pretty close to 90 cents, is it not?

Dr. Tolley: Well, 160 times 60 is 96 cents.

It looks now that if the standard contract is adhered to and if the continental payments are about the same as I mentioned the price to the producer in Louisiana this year will be, I will say, some place around $4.50 to $4.75 or $5 per ton on the average with a parity price being somewhat higher, $5.11.

Mr. Boggs: What percentage of parity do you calculate the grower will get on a basis of those figures?

Dr. Tolley: Well that would be something like 85 to 90 percent of parity; I have not calculated it.

Mr. Boggs: As a matter of fact, on August 15 about when the ceiling was established, the Department at my request inserted in the record the parity figures for both beet and cane sugar; on sugarcane at that time it was 92 percent of parity on the basis of those prices, as I remember.

Now since that time the index has gone up to date to about 135, has it not?

Dr. Tolley: It has gone up to 137.

Mr. Boggs: So that therefore the parity has dropped down by two points, and your figure of 87 to 89 now would be about correct.

Dr. Tolley: Yes.

Mr. Boggs: What I am trying to get at is this: It was testified yesterday that beef cattle, as I remember, cottonseed—

Dr. Tolley (interposing): Wool.

Mr. Boggs: Wool, and one or two other agricultural commodities were now ranging in price, well, some of them, of 150 percent of parity. I have no complaint to make with the producers of those commodities because I know, as the Secretary stated yesterday, that there have been many lean years preceding this year and that the fact that those producers are getting more for their products this year simply means it is probably the first opportunity they have had to pull themselves out of the red. But in view of the fact that we have four or five commodities which are away above parity, do you feel it is fair or reasonable for us to select one commodity which is not at parity, has not been near parity for many years and single it out for a ceiling and that that ceiling should be placed at 85 percent of parity when we have before us here a bill which is dedicated to the principle of 110 percent of parity?

Dr. Tolley: No; I still stand by my original statement, that any ceiling on agricultural commodities as such should not be less than 110 percent of parity, which in effect I think is an affirmative answer to your question, with a little observation following it. This ceiling is on the processed commodity; sugar, raw sugar.

Mr. Boggs: Raw sugar?

Dr. Tolley: Raw sugar, not the sugarcane as such.

The price that the producer gets as I stated, traditionally has been based upon the contract between the processor and the producer which has a price on raw sugar in it. So I would have to say, it seems, that no ceiling has been placed upon the price of sugarcane.

Mr. Boggs: That leads me to this question: You say that no ceiling has been placed on the price of sugarcane, but that a ceiling has been placed on the price of raw sugar; but by placing the ceiling on the price of raw sugar the price administrator has done

exactly the same thing that he would have done had he placed the ceiling on the price of sugarcane itself.

Dr. Tolley: No; I do not think so.

Mr. Boggs: Fundamentally it has the same effect.

Dr. Tolley: It has had the same effect up to date. I think it points to another thing, if I may say so. I believe there is a provision in the bill for ceilings on margin, manufacturers margins, and so on. And, this contract in which you have sugar producers working, as I understand it, is that as the producers' price goes up the manufacturers' margin goes up, based on the price. I think you will find that the fact is that as the producers price goes up the manufacturers margin goes up, and if the manufacturers' margin goes up—I am not sure about this—that if the manufacturers' margin were not increased the price that the producer gets for the raw sugar would be higher than it is now. Of course to do a thing like that you would depart from the traditional method in the contract.

Mr. Boggs: Dr. Tolley, is not this same problem presented in respect to almost any other agricultural commodity?

Dr. Tolley: In a great many.

Mr. Boggs: As in the case of cotton, in which Mr. Brown is interested, and I am as interested as he is, and as other members of this committee. But if the price administrator comes along and sets a ceiling on the first processing of an agricultural commodity, whether it be cotton or corn or wheat or wool or hides or anything else, will that not defeat the objectives of this bill of 110 percent of parity?

Dr. Tolley: Well, if the ceiling on the processed commodity were too low and if the margins were increased.

Mr. Boggs: In this case of sugar it is too low. Now that leads me to this question: Should we write something into this bill to prevent that from happening?

Dr. Tolley: Well, my suggestion would be to examine this margin phase of it; the margin phase of the bill.

Mr. Boggs: Do you have any suggestion as to how that difficulty could be overcome? Suppose on the first processing of every agricultural commodity the administrator were to set a ceiling so low that the producer just could not hope to get anything near parity, let alone 110 percent of parity, then what is there provided in this bill guaranteeing 110 percent of parity; what does such a provision mean?

Dr. Tolley: I think that is a real point. Of course, presumably the administrator of this bill would have as one of his governing principles in setting a ceiling on the processed agricultural commodity the provision in the bill that agricultural commodities as such should not have a ceiling below 110 percent, and that there has been a policy used by the Government for a long time to see that producers get parity, insofar as possible. I realize that is not a legal guaranty.

* * * * *

Mr. Boggs: Yes; I think it is a very important point. If we write into this bill the principle of parity and there is no provision dealing with the setting of a price on the first processor of the article, then what does it mean?

Dr. Tolley: You are raising a real question, and I agree with it; I do not see it quite through, except on the suggestion that I have made to the committee that you examine into this margin situation and see if something could be done about margins.

You might have in sugar or wheat or most anything else a situation at some time when the Administrator sets a ceiling on sugar or on flour that is pretty well up and it might be that the manufacturer's margin would increase so much, and not be under control of any kind, and the price of sugarcane or the price of wheat itself be just away down and then you would have the Administrator automatically raising it.

Mr. Brown: Would not the parity law itself take care of that?

Dr. Tolley: I think that needs to be considered in connection with the point I made of setting a ceiling on the manufacturer's margin, the manufacturer of agricultural products.

* * * * *

Mr. Crawford: As I understand the bill, the bill in no way obligates the Administrator to leave any margin of profit. He can set a ceiling which eliminates any possibility of margin, and there is no obligation imposed by the bill on the administrator to provide for a profit margin. I think he can set a ceiling which absolutely, if he wants to, so long as he could get away with it, practically destroy the capital structure of the man affected.

Dr. Tolley: Of course, I think you might say—and I do not have the bill before me—that under the fair-and-reasonable profit provision he is given a right to appeal to the special court.

Mr. Crawford: Yes; that is true.

Dr. Tolley: And the fair-and-reasonable clause protects him.

Mr. Boggs: As a matter of fact, Mr. Crawford, there has been a comparative decrease in the margin on sugar, refined sugar, since the ceiling has been set. As I remember, when sugar was selling at something like $3.80, refined prices were about $5.35. The ceiling on raws was set at $3.50, a drop of 30 cents, while the selling price of refined sugar has only dropped 10 cents.

And I have urged Mr. Henderson to go into the situation, and it is my feeling, and I agree with Dr. Tolley, that there is a very definite place for adjustment; whether we can write anything of that sort in this bill is another matter.

Mr. Crawford: If we do not write something of that kind into the bill, are we really doing what many believe that we are doing?

Mr. Boggs: Insofar as guaranteeing a parity of 100 percent.

Mr. Crawford: Yes.

Mr. Boggs: We may not be guaranteeing any 110-percent parity, because here you have a specific case; the only ceiling that has been set, and insofar as sugar cane is concerned it is about 85 percent of parity.

Mr. Crawford: Will you just let me make this further observation?

Mr. Boggs: Yes.

Mr. Crawford: Let us take the answer which Mr. Henderson gave to some of the questions which I asked him, where he spoke of the speculator involved in this whole matter, and I think you will find some of those are specifically referred at the same time.

Now, suppose you and I are sugar factors, or vegetable-canning factors, or fruit-canning factors, where we handle both the speculative ownership of the raw material and at the same time do first pro-

cessing, and the administrator takes the position that we are dealing as speculators primarily and not as processors, primarily, but being one and the same we are doing something which he does not like, and he cracks down on processors who are operating at a margin.

Dr. Tolley: Yes.

Mr. Crawford: I think you (Mr. Boggs) have put your finger on the very heart of this bill, insofar as agricultural commodities are concerned.

Mr. Boggs: That is one question that I wanted to develop.

Now, Mr. Tolley, about this concept of parity, and I am frank to admit that I do not know much about it; I have listened to a lot of testimony on it.

There has been a tendency on the part of the Office of Price Administration to come back with what they call national parity. In other words, what they are doing is taking sugar beets and putting a price ceiling of 3.50 on them, while as a matter of fact the price of sugar beets is fixed more by the refined price than the raw price. Is not that true, Mr. Crawford?

Mr. Crawford: I think so.

Mr. Boggs: So they are taking the parity price, so far as sugar beets are concerned, and sugarcane, and they have made an average. Of course, there is a lot more sugar beets produced than sugarcane in the United States, but they say they have a national average.

I do not understand why they should do that any more than taking all the grades of tobacco or any other average price and say you have parity. Is that the intention of this bill?

Dr. Tolley: You are talking about sugar.

Mr. Boggs: That is right.

Dr. Tolley: The parity price applies to sugarcane and sugar beets.

The parity price of sugarcane on September 15 was 5.11 cents, and the parity price on sugar beets per ton was $7.54, which is just the price of a ton of sugar beets times 137.

So we do have and we have been operating against two separate parities, the ones I have been talking about.

Sugar from sugarcane and sugar from sugar beets is all the same sugar when I put it in my coffee.

* * * * *

Mr. Boggs: It is something that worries me very much because there has been a tendency on the part of this Government to treat domestic sugar producers in such a way that we have been the football of domestic relations and foreign relations in all the policies of the Government, despite the fact that both political parties, in their national conventions, have always written something in their platforms for the benefit of sugar producers.

I feel very strongly on the subject because the production of sugarcane is a vital industry in my State. We have been producing sugarcane for well over a hundred years, and I do not think that that industry should be made a football and be disregarded, which is particularly true this time.

We have not received parity in years. In 1937, with the benefit payments, it was about 77 percent; in 1938 it was 75 percent, in 1939 it was 81 percent, in 1940 it was 78 percent, and under this bill it would be 85 percent, and it may be lower, if the index continues to go up. I think it will go up unless we enact this or similar legislation.

Also, it seems to me we are doing something contrary to the announced policy of the Government and the Secretary to encourage the production of essential food crops, and no one would deny that sugar is an absolute essential. As a matter of fact, I suppose there is a greater proportion of sweets used by the armed forces today than almost any comparable food.

But any policy which fails to give the producers parity, in my judgment, will not increase production.

In addition to that, as I recollect it, sugar is one of the few things that really got out of hand toward the end of the last war and the years after the last war, and the reason for that, as I understand it, was that we failed to encourage the domestic production of sugar, and were completely dependent on off-shore areas for our domestic consumption of sugar. What happened? We were paying 19, 20, and even 25 cents a pound for sugar.

So my feeling about the matter is that here is an industry that should have as much consideration as any other industry, and it is just as vital to the welfare of this Nation as any other industry.

Dr. Tolley, I would appreciate it if you would have put in the record the present parity prices of raw sugar, refined sugar, sugar beets, and sugarcane.

Dr. Tolley: Yes; I will be glad to do that.

## Chapter XI—Office of Price Administration

### Part 1334—Sugar

### Amendment to price schedule No. 16—Raw cane sugars

Section 1334.9[1] is hereby amended to read as follows:

§1334.9 Appendix A, maximum prices for raw cane sugars. (a) Maximum price raw cane sugars of 96 degrees polarization, New York City duty paid basis cost and freight, 3.50¢ per pound.

(b) Differentials for deliveries from off-shore producing areas to ports other than New York City: For deliveries at any port other than New York City, there shall be added to or subtracted from (whichever is required to compensate freight differences), the New York City price, adjusted for the various degrees of polarizations as below set forth, the difference, if any, between the cost of freight from the port of shipment to New York City and the cost of freight from the port of shipment to the port of arrival, except that for deliveries of raw cane sugars made pursuant to an annual or other similar long term purchase contract to which customarily no freight differential has applied, there may be added to or subtracted from the New York City price, in lieu of the above differential, an amount agreed upon between the parties in such contract, provided such contract shall first be approved by the Office of Price Administration.

(c) Differentials for deliveries of continental United States raw cane sugars: The maximum prices for such sugars are established at the raw sugar mill and shall be calculated by obtaining the maximum price duty paid cost and freight basis, payable for Cuban sugars of like test at the nearest customs port of entry in the area in which the raw sugar mill is located, and deducting from such maximum price the published freight rate from such raw sugar mill to the refinery nearest freightwise to such raw sugar

mill. This maximum price is F.O.B. the raw sugar mill. The maximum price delivered to the refinery shall be this maximum F.O.B. mill price plus actual transportation cost from said raw sugar mill to the refinery processing such sugar.

(d) Adjustment for polarization: The maximum prices specified herein shall be adjusted by making allowances per pound for each degree of polarization above or below 96 degrees (fractions of a degree in proportion) in accordance with the method customarily used prior to August 14, 1941. It is not required that such method be used. However, the maximum prices for the various tests shall not exceed the prices obtained by applying such method for sugars of like test. (Executive Orders Nos. 8734, 8875, 6 F.R. 1917, 4483)

This amendment shall become effective October 24, 1941.

Issued this 23d day of October 1941.

LEON HENDERSON
Administrator.

(F.R. Doc. 41-8008; Filed, October 24, 1941; 9:35 a.m.)

[1] 6 F.R. 4064.

---

# United States Department of Agriculture, Agricultural Adjustment Administration

Baton Rouge, Louisiana
October 23, 1941

To: Louisiana Sugar Mills
(Copy to Parish Administrative Officers & County Committeemen)

Subject: Determination of Fair Prices for 1941 Crop

Enclosed you will find a copy of the "Determination of Fair and Reasonable Prices for the 1941 Crop of Mainland Sugarcane for Sugar, Pursuant to the Sugar Act of 1937".

The rates for the Louisiana crop are the same as in 1940, with two additions or modifications. These are:

(1) That although the price quotations of the New Orleans exchanges will continue to be used "...if such quotations do not give full effect to orders or regulations of the Federal Government pertaining to the establishment of a price for 96° raw sugar, duty-paid basis, at New Orleans, Louisiana, the Chief of the Sugar Division may substitute such prices as will give effect to any such Federal orders or regulations:"

(2) "Provided, however, that on each ton of sugarcane there shall be paid a molasses bonus, such bonus to be computed by taking ½ of the excess, if any, of the average price per gallon of blackstrap molasses, as quoted by the agencies set out in (2) above for the period there specified, over 8 cents, and multiplying the product by 6½ (a figure representing the state average recoveries of blackstrap molasses for the three year period, 1938-1940), except that in computing such bonus any processor who, prior to October 4, 1941, has sold in excess of one-half of the blackstrap molasses of the 1941 crop at an established price, may, after announcement to growers served by him of the price terms of such sale, substitute for the season average price the price actually realized by him, any quantity unsold as of April 2 to be valued at the season average price".

Your attention is also called to the change in the settlement period for those processors who pay for cane on the simple average of the weekly quotations. The 1941 settlement period extends from October 17, 1941 (or the Friday within the first marketing week of actual trading) to April 2, 1942, instead of from October 11, 1940 to March 27, 1941, as provided in the 1940 determination.

G. J. Durbin
Administrative Officer in Charge

Enclosures
WMG-EG

---

TITLE 7
UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL ADJUSTMENT ADMINISTRATION
CHAPTER VIII
SUGAR DIVISION
Part 802—Sugar Determinations

## DETERMINATION OF FAIR AND REASONABLE PRICES FOR THE 1941 CROP OF LOUISIANA SUGARCANE FOR SUGAR, PURSUANT TO THE SUGAR ACT OF 1937

WHEREAS, Section 301 (d) of the Sugar Act of 1937, as amended, provides, as one of the conditions for payment to producers of sugar beets and sugarcane, as follows:

"That the producer on the farm who is also, directly or indirectly, a processor of sugar beets or sugarcane, as may be determined by the Secretary, shall have paid, or contracted to pay under either purchase or toll agreements, for any sugar beets or sugarcane grown by other producers and processed by him at rates not less than those that may be determined by the Secretary to be fair and reasonable after investigation and due notice and opportunity for public hearing."

WHEREAS, the Secretary of Agriculture held public hearings in Louisiana for the purpose of receiving evidence likely to be of assistance to him in determining fair and reasonable prices for the 1941 crop of Louisiana sugarcane for sugar:

NOW, THEREFORE, I, ..... Secretary of Agriculture, after investigation and consideration of the evidence obtained at the aforesaid hearings and all other information before me, do hereby make the following determination:

Section 802.22g (a) *Fair and Reasonable Prices for the 1941 Crop of Louisiana Sugarcane for Sugar.* Fair and reasonable prices for the 1941 crop of Louisiana sugarcane shall be (when the price of 96° raw sugar, duty-paid basis, is 3.50 cents per pound) not less than $1.00 per ton of standard sugarcane for each 1 cent of the average price per pound of raw sugar determined in accordance with whichever of the following options is agreed upon: (1) the average of the weekly quotations of 96° raw sugar, duty-paid basis, on the Louisiana Sugar and Rice Exchange and the Cane Products Trade Association Exchange for the week in which such sugarcane is delivered; or (2) the simple average of the weekly quotations of 96° raw sugar, duty-paid basis on the Louisiana Sugar

and Rice Exchange and the Cane Products Trade Association Exchange for the weeks from Friday, October 17, 1941 (or the Friday within the first marketing week of actual trading) to April 2, 1942, except that, if such quotations do not give full effect to orders or regulations of the Federal Government pertaining to the establishment of a price for 96° raw sugar, duty-paid basis, at New Orleans, Louisiana, the Chief of the Sugar Division may substitute such prices as will give effect to any such Federal orders or regulations:

*Provided, however,*

(i) That on each ton of sugarcane there shall be paid a molasses bonus, such bonus to be computed by taking $\frac{1}{2}$ of the excess, if any, of the average price per gallon of black strap molasses, as quoted by the agencies set out in (2) above for the period there specified, over 8 cents, and multiplying the product by $6\frac{1}{2}$ (a figure representing the state average recoveries of blackstrap molasses for the three year period, 1938-1940), except that in computing such bonus any processor who, prior to October 4, 1941, had sold in excess of one-half of the blackstrap molasses of the 1941 crop at an established price, may, after announcement to growers served by him of the price terms of such sale, substitute for the season average price the price actually realized by him, any quantity unsold as of April 2 to be valued at the season average price;

(ii) That for each decline of $\frac{1}{4}$ cent in the price of 1 pound of 96° duty-paid basis, below 3.50 cents per pound, the price of standard sugarcane shall be reduced by not more than 3 per centum, with intervening prices in proportion, unless the price of sugar falls below 2.75 cents per pound, in which case no further reduction shall be made;

(iii) That for an advance of $\frac{1}{4}$ cent in the price of 1 pound of 96° raw sugar, duty-paid basis, above 3.50 cents per pound, the price of standard sugarcane shall be increased by not less than 3 per centum, with intervening prices in proportion, unless the price of raw sugar exceeds 3.75 cents per pound, in which case settlement shall be made on the basis of $1.03 for each 1 cent of the price;

(iv) That the premiums paid for sugarcane of the 1941 crop containing more sucrose in the normal juice than that defined as standard sugarcane shall not be less than those paid during the 1940 crop year;

(v) That the discounts applicable to sugarcane of the 1941 crop containing less sucrose in the normal juice than that defined as standard sugarcane shall be not greater than those applied in connection with the 1940 crop; and

(vi) That deductions based upon decreased boiling house efficiency may be made for frozen sugarcane accepted by the processor (it being understood that cane shall not be considered as frozen even after being subjected to freezing temperature unless and until there is evidence of damage having taken place because of the freeze) at a rate not in excess of 3.775 per centum of the payment, computed without regard to the molasses bonus, for each 0.25 cc. of acidity above 2.25 cc. but not in excess of 4.50 cc. (analyzed in accordance with the established methods of the area, with intervening fractions computed to the nearest multiple of 0.05 cc.).

(b) *Definitions and general provisions.* For purposes of this determination:

(1) Standard sugarcane shall be sugarcane containing no more sucrose in the normal juice than was defined as standard sugarcane by the processor in his sugarcane purchase contract, or contracts, verbal or written, used in the year 1940.

(2) Costs, such as hoisting and weighing of sugarcane, shall be absorbed by the processor, except in those instances in which the processor operated in 1936 and did not bear such costs in that year; but nothing in this sub-paragraph shall be construed as prohibiting negotiations with respect to the level of such costs, subject, upon appeal, to review by the Secretary of Agriculture or his authorized agent, in the event of changes alleged to be unfair to either the producer or the processor.

(3) Where the only available practicable means of transportation are rail facilities and the distance to the nearest factory is in excess of 50 miles, the cost of transportation may, by mutual consent of the interested parties, and subject, upon appeal, to review by the Secretary of Agriculture or his authorized agent, be shared by the processor and the producer.

(4) The processor shall not, through any subterfuge or device whatsoever, reduce the returns from the 1941 crop of Louisiana sugarcane to the producer below those determined above.

(Sec. 301, 50 Stat. 909; 7 U.S.C., 1131).

Done at Washington, D. C., this 24th day of October, 1941. Witness my hand and the seal of the Department of Agriculture.

Secretary

## Fertilizer Situation

(*C. J. Bourg*)

The officials in charge of the Office for Agricultural Defense Relations have made it very plain to the American Sugar Cane League that they intend

JACKSON BREWING COMPANY, NEW ORLEANS, LA.

to protect and assist sugarcane growers and other farmers in obtaining fertilizer at reasonable prices.

With particular reference to ammonium sulfate, the officials pointed out that their surveys have indicated a sufficient supply of ammonium sulfate for fertilizer purposes to take care of the requirements for 1942. The Office for Agricultural Defense Relations has requested the cooperation of farmers in order that the prices indicated as fair by OPACS on May 26, 1941, may not be exceeded. If the farmers will refuse to pay more than $30.00 per ton, which is $28.00 per ton at inland ovens or $29.00 a ton at ports, the Government will be able to maintain a fair price level and at the same time assist farmers in getting the fertilizer they need.

Naturally, these results can only be assured if the farmers will keep the Office for Agricultural Defense Relations advised of any difficulties which arise. The American Sugar Cane League has assured the Office for Agricultural Defense Relations of our willingness to cooperate, in order to insure an adequate supply of ammonium sulfate at reasonable prices.

The announcement by OPACS, dated May 26, 1941, is as follows:

"Producers and distributors of ammonium sulfate for fertilizer purposes have been requested by letters to continue formal price quotations now current for this commodity, Leon Henderson, Administrator, Office of Price Administration and Civilian Supply, announced today.

"Ammonium sulfate is chiefly a by-product of the coke industry, the principal producer. It is one of the most important sources of fertilizer nitrogen. It is the custom in the trade to establish the price for the next fertilizer season at this time of the year.

"Quotations now current are as follows: on contract, $28 a ton at inland ovens; $29 a ton at port; and spot prices $1 per ton higher.

"In making his request, Mr. Henderson pointed out that there has been some tightness in the supply of this commodity but there is no justification for an increase in the price, since the coke industry has been operating at capacity for many months.

"Mr. Henderson stated that there appears to be no warrant for a so-called 'outside' or 'export' market such as has developed in ammonium sulfate during the past season. This was not at all times a genuine export price but to a considerable extent represents speculation, he explained.

"'If it becomes necessary to prevent the development of such an outside or export market at prices in excess of those maintained by reputable distributors and producers, the Office of Price Administration and Civilian Supply will place a price ceiling on ammonium sulfate at current levels,' Mr. Henderson added.

"He asked producers and distributors to inform his office well in advance of any contemplated action looking toward higher prices."

A maximum price of $30.50 per ton at ports has been established on Sodium Nitrate.

## Prominent Sugarcane Producer Signally Honored by the American Farm Bureau Federation

Mr. Stephen C. Munson, Jeanerette, La., member of the Executive Committee and Chairman of the important Contact Committee of the American Sugar Cane League, is signally honored by appointment to the "Field Crops Conference" of the American Farm Bureau.

We are proud of the recognition accorded Mr. Munson. We are encouraged by seeing sugarcane directly represented when an appraisement or evaluation of Field Crops in the American Agricultural Picture is made.

We are confident that Mr. Munson, as a Committeeman, will render valuable service to Agriculture.

Squier Sugar Machinery

MILLS and CRUSHERS
AIR-DRAULIC ACCUMULATORS
JUICE HEATERS
EVAPORATORS, CAST IRON AND WELDED PLATE
PANS, CAST IRON AND WELDED PLATE
CRYSTALLIZERS
HIGH SPEED CENTRIFUGALS
SUGAR DRYERS
PUMPS AND FANS
COMPLETE SUGAR FACTORIES

The Geo. L. Squier Mfg. Co
462 Broadway Buffalo, N. Y.

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

LAMBORN & COMPANY, INC.
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

LE BOURGEOIS BROKERAGE CO.
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
HARRY L. LAWS & CO., INC.
Brokers and Distributors
SUGAR and MOLASSES
SUGAR FUTURES
American Bank Building New Orleans, La.

GAY, SULLIVAN & CO., INC.
SUGAR
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

STAUFFER, ESHLEMAN & CO., LTD.
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
CYANAMID
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

INDUSTRIAL LUBRICANTS

BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
STANDARD OIL CO. OF LA.

FOR SUGAR CANE FINANCING
STATE AGRICULTURAL CREDIT CORPORATION, INC.
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

AMERICAN MOLASSES CO.
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LEGardeur Frank Youngman
R. J. LEGARDEUR & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

PENICK & FORD, LTD., INCORPORATED
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

STANDARD SUPPLY AND HARDWARE CO., INC.
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

E. A. RAINOLD, INC.
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

Chemistry Library,
Louisiana State University,
University, La.

THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 20 NEW ORLEANS, LA., NOVEMBER 15, 1941 No. 4

# Amendments to Sugar Act Proposed

(*By C. J. Bourg*)

A Bill (H.R. 5988) has been introduced in the House of Representatives by Mr. Fulmer of South Carolina, who is Chairman of the Committee on Agriculture, the purpose of which is to extend the Sugar Act for three years and to provide several amendments. A companion Bill (S. 2041) has been introduced in the Senate jointly by Senators O'Mahoney of Wyoming, Adams of Colorado, and Ellender of Louisiana.

The Bill is a modified response to the wishes of the domestic sugar industry. In view of the national emergency, the Department of Agriculture has announced its intention to encourage the production of food crops. As a result of this change from the policy of scarcity to a policy of abundance, it is anticipated that as long as the emergency lasts, there will be no acreage restrictions on the production of sugar beets and sugarcane; therefore, the proposed amendments to the Sugar Act are for the most part expressions of principle and policy, rather than an attempt to correct inequalities in the distribution of quotas or to establish changes of a permanent nature. It is expected that the long-range Federal Sugar Policy will be determined when the emergency ends and will be based upon the experiences of the American public with regard to sugar supplies and sugar prices during the emergency and immediately following.

The first amendment increases the quotas for the continental beet and cane areas by 4%. This amounts to about 16,000 tons for the Mainland Cane Sugar Area, or a minimum quota of 436,000 short tons, raw value. The Domestic Beet Sugar Area will receive an additional 62,000 tons, establishing a minimum quota of 1,612,000 short tons, raw value.

The amount of the quotas for Hawaii, Puerto Rico, and the Virgin Islands, remains the same, and the Philippine quota continues to be the duty-free quota now established by the provisions of the Philippine Independence Act.

The quota for Cuba is reduced by 75,000 tons, which is taken from their refined sugar quota. Under the present law, the Cubans are allowed to import 375,000 tons of direct-consumption sugar, and the Bill proposes that this be reduced to 300,000 tons.

Another amendment takes into account the Philippine situation. The difficulties of obtaining ships for the transportation of Philippine sugar to the United States have been increasing, and there is no telling what will happen if the Japanese situation becomes aggravated. Under the present law, the deficit in the Philippine quota is allocated to "foreign countries other than Cuba." Should the deficit become very great, these foreign countries would be unable to fill the quota. The Bill provides that any amount of refined sugar, which the Filipinos are unable to market from their direct-consumption sugar quota of 50,000 long tons, would be first allocated to the Domestic Beet Sugar Area and the Mainland Cane Sugar Area. Instead of all of the deficit going to "foreign countries other than Cuba," this group will receive an amount not in excess of 100,000 short tons of the raw sugar quota. Above the 100,000 short tons, the distribution is made on the basis of their respective quotas to Hawaii, Puerto Rico, the Virgin Islands, and Cuba.

Of course, if the foreign areas as a whole, or any domestic area, are unable to fill the deficit re-allotted to such area, then the re-allocation of such deficit is to be made to the domestic sugar-producing areas and Cuba, on the basis of the respective quotas for such areas then in effect and their ability to fill the deficit. Under the present law, if the foreign countries were

THE
SUGAR BULLETIN

414 Whitney Bldg., New Orleans

Marcel J. Voorhies, Editor

Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated The Louisiana Sugar Planters' Assn. The American Cane Growers' Assn. The Producers & Mfrs. Protective Assn
Subscription Price, 50 Cents per Year.

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE

President, W. C. Kemper, Franklin, La.

1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

EXECUTIVE COMMITTEE

W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

unable to make up the deficit, there was no provision for re-allocation to domestic areas.

The amendment of greatest immediate interest and effect, as far as growers may be concerned, is the one to Section 304, whereby the base rate of payment is changed from 60c per cwt. of sugar to 80c per cwt. of sugar. Expressed in terms of tons of sugarcane, which is the normal method of computing the returns of sugarcane growers, the average payment on the 80c basis would become approximately $1.28 per ton of sugarcane, to be paid in addition to the amount received by the grower per ton from the factory. The amendment includes a graduated scale of reductions in payments, depending upon the amount of sugar made from the cane produced on each farm. The present law contains such a scale of reductions, but the proposed amendment has a greater number of steps, as shown by the following table.

For the grower who produces less than 350 tons of sugar on his farm, the base rate of 80c will be paid in full. In the case of all growers, the 80c will be paid up to 350 tons of sugar, equal roughly to 4,375 tons of sugarcane. Above 350 tons of sugar, the payments to be made on that portion of the quantity of sugar which is included within the following intervals will be:

| Tons of Sugar | Payment on Tonnage of Each Interval |
|---|---|
| Up to 350 | 80c |
| 350 to 700 | 75c |
| 700 to 1,000 | 70c |
| 1,000 to 1,500 | 60c |
| 1,500 to 3,000 | 55c |
| 3,000 to 6,000 | 52.5c |
| 6,000 to 12,000 | 50c |
| 12,000 to 30,000 | 47.5c |
| More than 30,000 | 30c |

A technical amendment to stop the importation of sugar in syrups is provided, by which the definition of liquid sugar which is chargeable against the quota of each area is changed to include up to 8% of soluble sugar solids, instead of the present 6% of soluble sugar solids. It is estimated that this will force the charging of some 35,000 to 40,000 tons of sugar against quota, which is now being brought in without quota charge because the definition has been limited to 6%.

The sixth amendment extends the Sugar Act, so that the powers vested in the Secretary of Agriculture shall terminate on December 31, 1944, or three additional years, including payments on the crop of 1944. The tax on sugar will also be extended on sugars manufactured, used, or imported up to June 30, 1945, in order to cover the marketing of the 1944 crop and to provide the funds for the payments to growers.

As this Bill provides for revenue through the sugar tax, it must originate in the House of Representatives, and the Committee on Agriculture to whom the Fulmer Bill has been referred, will have to initiate consideration of the measure. In view of the fact that Mr. Fulmer is Chairman of the Committee on Agriculture, it is expected that there will be no delay in the action of the Committee. Although no public hearings have been announced, it is also expected that there will be a short public hearing. The lateness of the Session and the approaching Holiday Season also indicate that prompt action will be necessary in order to avoid the expiration of the Sugar Act on December 31, 1941, as now provided; otherwise, there would be a lapse in January with regard to quotas and the tariff.

## Price-Control Bill

The House Committee on Banking and Currency has reported favorably a Bill granting authority to control prices. In connection with prices of agricultural commodities, definite restrictions are established. Section 3 provides that "No ceiling shall be established for any agricultural commodity below

"(1) the market price equivalent to 110 per centum of the parity price or comparable price for such commodity, adjusted for grade, location, and seasonal differentials, as determined and published by the Secretary of Agriculture; nor

"(2) the market price prevailing for such commodity on October 1, 1941; nor

"(3) the average price for such commodity during the period July 1, 1919 to June 30, 1929."

Thus, the highest of the three alternatives would be chosen in the case of each commodity.

Section 3 further provides that parity prices shall be determined and published by the Secretary of Agriculture, as authorized by law. The Secretary has been authorized by law to establish parity on the basis of prices which prevailed between August 1, 1909, and July 31, 1914. There is a proviso which gives discretionary authority, in general terms. It is

expected that the meaning of this general language will have to be clarified and explained when the Bill comes up for consideration in the House. The discretionary authority granted to the Secretary reads as follows:

"Provided, That in the case of any agricultural commodity other than the basic crops—corn, wheat, cotton, rice, and tobacco—the Secretary shall determine and publish a comparable price, whenever he finds, after investigation and public hearing, that the production and consumption of such commodity has so changed in extent or character since the base period as to result in a price out of line with parity prices for basic commodities."

A third subsection of Section 3 provides that no ceiling on any processed agricultural commodity shall be established "in any manner as to circumvent, vitiate, or prevent" the farmer from receiving 110% of parity on his farm product. In the case of sugar, the ceiling has been placed at 3.50c a pound on raw sugar. As we understand the subsection, the Administrator of the Office of Price Control would have to adjust the ceiling on raw sugar in such manner that the sugarcane grower would receive 110% of parity for his sugarcane and the sugar beet grower would have to receive 110% of parity for his sugar beets. As we figure the situation existing today, the computations would be as follows:

| | per ton |
|---|---|
| Price of sugarcane, 1909-14 | $3.73 |
| Index for October | 138 |
| Parity for sugarcane | 5.15 |
| 110% of Parity | 5.66 |
| Deduct Government Payment | 1.00 |
| Balance | 4.66 |
| Grower-Processor Contract 3% premium basis (4.66 divided by 103) | $4.48 |

Therefore, in order for a sugarcane grower to receive 110% of parity for his cane, on the basis of the October 1941 index, the ceiling of raw sugar need not be higher than 4.48c per pound. If the average index for 1941 to date were used (as was done by Mr. Henderson when he testified in August), the raw sugar ceiling would be lower.

When we consider both the amendments to the Sugar Act and the provisions of the Price-Control Bill, and assuming that both would be passed as presently written, the base rate of 80c per cwt. would mean that the Government payment per ton of sugarcane would amount to $1.28 instead of $1.00. In that case, the computations would have to be as follows:

| | |
|---|---|
| 110% of parity | $5.66 |
| Deduct Government Payment | 1.28 |
| Balance | 4.38 |
| Grower-Processor Contract 3% premium basis (4.38 divided by 103) | $4.25 |

Hence, if Congress passes the Fulmer Bill with the 80c base rate and the Price-Control Bill providing 110% of parity, a raw sugar ceiling of $4.25 would net the sugarcane growers 110% of parity, or $5.66 per ton of sugarcane.

The above examples are based upon our interpretation of the language of the proposed legislation and on the assumption that the application of the law will be made in accordance with procedure already used under the Jones-Costigan Act and in the establishment of parity programs for agriculture.

# A Summary of Recent Investigations of Sugarcane Borer Control With Cryolite and Other Insecticides*

*(J. W. Ingram, U. S. Department of Agriculture Bureau of Entomology and Plant Quarantine, A. L. Dugas, Louisiana Agricultural Experiment Station)*

A number of insecticides have been tried in various countries for the control of the sugarcane borer, but prior to the testing of cryolite none of them had given a sufficiently high degree of control to warrant their use on a commercial scale. Following the development of cryolite as a good insecticide for the control of other insect species, however, laboratory experiments conducted by the Louisiana Agricultural Experiment Station in 1936 indicated that this chemical would be worth testing against the borer in field plots. In the fall of 1937, therefore, this Station, in cooperation with the Bureau of Entomology and Plant Quarantine, of the United States Department of Agriculture, began further investigations of borer control by means of insecticides, with special emphasis on the use of cryolite. These studies are still in progress and the present article is a preliminary report on this work.

*Summary of findings and possibilities of borer control by dusting.*—From experiments conducted to date it appears that either domestic or foreign synthetic cryolite can be depended on to kill 90 percent or more of the first generation of borers in the spring, provided the cane is dusted four times at weekly intervals beginning with the hatching of eggs laid by moths emerging from overwintered borers. This finding is further substantiated by a similar degree of borer control obtained with cryolite applied to small plants developing in the fall from cane planted the previous summer. When tried in small plots, the benefit of first-generation dusting was overcome by infestation resulting from the influx of later generations of moths from untreated areas. It was thought that the use of larger plots would to a great extent do away with this influx so that the dusting would show a benefit. This surmise was substantiated by the results of a large-acreage experiment conducted with a ground dusting machine in 1939. Further experiments are necessary to determine the harvesttime value of first-generation dusting. Dusting for the control of second-generation borers appears to be of rather doubtful value.

Domestic synthetic cryolite is a byproduct of the aluminum industry and contains 85 to 90 percent of sodium fluoaluminate. At present bulk quantities of this material would cost from 11 to 13 cents per pound delivered in Louisiana. The total cost of making four applications to control first-generation borers is estimated at between $3 and $4 per acre. Under normal plantation conditions it would probably be worth while to dust only the stubble cane, and of that only such fields as are located in areas usually suffering average or above-average infestation. Thus, dusting only about 30 or 40 percent of the cane on a given plantation might give a high degree of borer control for the entire plantation. Dusting might be of special value in controlling borers in seed plots

*Joint cooperative work. The position of the authors' names does not indicate seniority.

and in valuable seedling canes. Seedling canes being tested by the Bureau of Plant Industry at Houma have been dusted at times in the past to eliminate the variable of borer injury. No appreciable burning of sugarcane plants has resulted from the use of cryolite.

Two small replicated-plot experiments to test various insecticidal treatments are being conducted this year (1941) on first-generation borers, one on Southdown Plantation and one on Sterling Plantation. Large-acreage experiments in controlling first-generation borers are being conducted on Albania, Oaklawn, and Reserve Plantations. It is planned to conduct additional experiments on second-generation borers.

*General procedure.*—Past experience and knowledge of borer life history indicated that control possibilities were greatest with young borers before they entered the cane stalk and with small cane that could be more easily covered by an insecticide than larger cane. Hence it was decided to concentrate on the control of borers of the first and second spring generations.

The experiments were of two types. In replicated small plots Bordeaux-calcium arsenate, derris, nicotine sulfate, dual-fixed nicotine,[1] pyrethrum, 2-4-dinitro-6-cyclohexylphenol mixed with sulfur, and various forms of cryolite, all applied as dusts, were tested to determine their value in killing borers. In large-acreage plots an effort was made to determine the harvesttime value of applying synthetic cryolite weekly during the spring to control the first generation of the borer. The small-plot experiments were each made up of four to six small plots of each treatment, each plot being five rows wide and 72 feet long, or one-twentieth of an acre in size. There was a buffer area of 20 to 30 feet at each end and a buffer area of not less than three rows on each side between individual plots, and these buffer areas were untreated. Insecticides were applied at the rate of 10 to 12 pounds per acre in the small plots.

*Small-plot experiments in the fall on cane planted the preceding summer.*—Since the fall growth of summer-planted cane closely resembles that of cane in the spring at the time of first-generation borer injury, preliminary small-plot experiments were conducted in the fall on such cane. The plants were dusted at weekly intervals with the various insecticides to be tested, at the rate of about 10 pounds of dust per acre beginning with the finding of the first borer eggs and continuing until eggs were no longer found on this cane. In 1937 one experiment was conducted on Reserve Plantation and another on Raceland Plantation. Examinations to determine the degree of borer control consisted of determining the number of borer-killed plants and borer stages in representative samples from each plot. In terms of live borer stages found, the following percentages of reduction in numbers of borers as compared with infestations in untreated areas were obtained: With synthetic cryolite at Reserve Plantation 89 percent and at Raceland Plantation 92 percent, with natural cryolite 92 and 96 percent, and with Bordeaux-calcium arsenate an increase in borers of 28 and 39 percent. Natural cryolite was so difficult to apply that it was not included in future experiments until 1941.

In a similar experiment in the fall of 1938, with both domestic and imported synthetic cryolite, dusting was started late and consequently some borers escaped treatment. However, on borers from eggs that hatched after dusting was begun domestic synthetic cryolite gave a 97 percent reduction in borer stages and imported synthetic cryolite gave practically the same degree of control. Lengthening the interval between applications from 7 to 10 days and to 2 weeks decreased the effectiveness of synthetic cryolite.

In an experiment in the fall of 1939 synthetic cryolite gave 91 percent reduction in number of borers, synthetic cryolite mixed with an equal weight of sulfur 51 percent reduction, and sulfur alone resulted in a 30 percent increase in borers over the untreated check plots. A mixture of 94 percent of sulfur with 1 percent of 2-4-dinitro-6-cyclohexylphenol and 5 percent of inert material gave no decrease in borer population.

In the fall of 1940 no summer-planted cane was available for experiments owing to unfavorable weather at planting time.

*Small-plot experiments in first-generation borer control.*—In small-plot tests for the control of first-generation borers the plants were dusted four times at weekly intervals beginning with the earliest hatching of the insects. Three small-plot experiments were conducted in 1938, but in only two of these was the borer infestation sufficiently high to give reliable data. In these two experiments synthetic cryolite gave 96 percent control, synthetic cryolite diluted with an equal weight of talc 78 and 81 percent, dusting cryolite,[2] which contained only 31.7 percent of sodium fluoaluminate, 72 and 88 percent control, and dual-fixed nicotine only 11 and 9 percent control. Dusting was continued through the period during which the second generation was becoming established. In three additional experiments in 1938 the dusts were applied only twice and three times. Owing to the small number of applications and to the fact that dusting was begun after the peak of hatching of first-generation borers, less than 50-percent control was obtained with synthetic cryolite.

In 1939 three experiments were conducted in which domestic synthetic cryolite dusts, with and without phenothiazine or a spreading agent, were tested with four applications at weekly intervals and three applications at 10-day intervals. In only one experiment a sufficiently high infestation developed to give reliable results. In this test synthetic cryolite dust alone when applied four times at weekly intervals gave 92-percent control of borer larvae and when applied three times at 10-day intervals gave 65-percent control. When mixed with 1 percent of a proprietary compound containing phenothiazine and applied three times at 10-day intervals this insecticide gave 75-percent control and when mixed with 1 percent of a proprietary spreader gave 47-percent control. Synthetic cryolite applied three times at weekly intervals beginning 1 week after first-generation borers began to hatch gave 76-percent control.

In 1940 the infestation was too light to justify conducting experiments on first-generation borers.

*Large-acreage experiments on first-generation borers.*—In 1939, on Reserve Plantation, 40 acres of cane were dusted with synthetic cryolite four times at weekly intervals for the control of first-genera-

[1] A product made up of nicotine-tannate powder and nicotine-bentonite powder and containing 3.75 percent of nicotine. It was developed by C. H. Batchelder.

[2] Another product of the same manufacturer from whom the domestic syntheitc cryolite was obtained.

tion borers. An average of 5.91 pounds of the material was used per acre per application and the dust was applied by means of a 5-row power dusting machine. In counts and examinations of dead hearts in May and June 73 first-generation borers were found per acre in the dusted area and 992 in the untreated check area. In August the percentages of stalks bored were 31.9 in the dusted area and 83.1 in the check area. At harvesttime the percentages of joints bored were 17.7 in the dusted area and 37.6 in the check area.

On Waterford Plantation 52 acres of sugarcane were dusted three times by airplane at intervals of 8 to 10 days, the dust being applied at the rate of 9.6 pounds per acre per application. First-generation borers found per acre following the dusting were 111 in the dusted area and 218 in the check area. In August the percentages of stalks bored were 46.2 in the dusted area and 54.9 in the check area. At harvesttime the percentages of joints bored were 31.4 in the dusted area and 43.8 in the check area.

At Reserve the net profit from increase in yield of sucrose, in excess of that required to defray the cost of dusting with the ground machine, was estimated to be over $11 per acre. It was estimated that the value of airplane dusting at Waterford was about equal to the cost. The lack of profit in this experiment is thought to have been due to several factors, namely, the lighter infestation, the reduction in number of applications, the increase in time intervals between them, and possibly also to inefficiency of airplane dusting on small plants on rows 6 feet apart.

*Experiments in controlling second-generation borers.*—In 1938 three small-plot experiments were conducted in which dusts were applied weekly from early April until late June for the control of both first- and second-generation borers. On examination it was found that 1.7 percent of the joints were bored in the plots treated with synthetic cryolite as compared with 17.8 percent in the untreated plots. The percentages of joints bored in other treated plots were as follows: Equal parts of synthetic cryolite and talc 6.9, dusting cryolite 5.4, and dual-fixed nicotine 13.4.

In another set of three experiments in 1938 dusts were applied four times at weekly intervals while second-generation borers were hatching. In plots treated with domestic synthetic cryolite an average of 8.7 percent of the joints were bored, in those treated with synthetic cryolite and talc 10.0 percent, in those treated with dusting cryolite 10.2 percent, and in the check plots 19.7 percent.

In three other experiments in 1938 domestic synthetic cryolite was applied on 1/2- to 3/4-acre plots for the control of second-generation borers, and alternate similar plots were left untreated. The insecticide was applied four times at weekly intervals from June 7 to 28 at the rate of 6 to 8 pounds per acre. In the dusted plots an average of 5.1 percent of the joints were bored as compared with 12.3 percent in the untreated plots when examinations were made in midsummer. By harvesttime, however, there was little difference in the infestation owing to the movement of moths from untreated to treated plots.

In 1940 the borer infestation was extremely low, owing primarily to the unusually cold weather, and it was necessary to conduct all experiments on second-generation borers. Duplicate small-plot experiments were conducted, but the infestation was too low to give significant results. However, in one experiment there were twice as many bored stalks in plots dusted with copper arsenate as in the undusted plots, and in the other experiment there were three times as many bored stalks in the plots dusted with this material as there were in the undusted plots.

Two large-acreage dusting experiments were also conducted in 1940 in which domestic synthetic cryolite was applied four times at weekly intervals with a ground machine to control second-generation borers. On Germania Plantation 23.7 acres of Co. 290 stubble and plant cane were dusted and on Sterling Plantation 22.9 acres of stubble cane of several varieties were dusted. At Germania in August the percentages of bored plants in stubble cane were 2.05 in the dusted area and 4.23 in the undusted area, while in the plant cane the percentages were 4.51 in the dusted area and 7.22 in the undusted area. At Sterling in August the percentages of bored plants were 4.30 in the dusted area and 11.04 in the undusted area. At Germania the harvesttime percentages of joints bored in the stubble cane were 6.83 in the dusted area and 7.64 in the undusted area and in plant cane 8.47 and 12.66, respectively. At Sterling the harvesttime percentages of joints bored were 5.51 in the dusted area and 12.19 in the undusted area. In each experiment rain fell on 14 of the 28 days in the dusting period, which undoubtedly greatly decreased the effectiveness of the insecticide.

## United States Department of Agriculture, Agricultural Adjustment Administration

University Station
Baton Rouge, Louisiana
October 13, 1941

To: Parish Administrative Officers, County and Community Committeemen in Parishes Producing Sugarcane for Sugar

Subject: 1942 Sugarcane Production Goals

Since many questions have been raised by parish administrative officers, county agents, producers of sugarcane and others interested in the production of sugar in Louisiana concerning the permitted acreage of sugarcane for sugar for the 1942 crop, it is deemed advisable at this time to make the following announcement:

Calling for no definite production goals for sugar, such as are established for most other commodities, the Farm Defense Program of 1942 instead will probably result in the removal of all acreage limitations on both beet and sugarcane plantings in the United States in 1942, AAA Sugar Division officials recently said. There has been some concern during 1941 as to whether enough ships would be available to bring the usual quantities of sugar to our shores from the Philippine Islands. This has been reflected in the apparent desire on the part of sugar buyers, as well as housewives, to carry greater reserve supplies. However, the Sugar Division points out that it is now clear that for 1941 practically all of the usual Philippine Island sugar quota will be filled. For 1942, the probability that acreage limitations on domestic production will be removed makes the sugar situation a bright spot against the international picture.

It has now been determined, after conference with

Sugar Division officials on their recent trip to Louisiana, that no acreage limitations will be imposed on the mainland cane sugar area for the 1942 crop. This means that sugarcane producers will be permitted to plant as much sugarcane as they wish for harvest during the 1942 crop. This ruling applies whether or not Congress extends the present Sugar Act which expires December 31, 1941. However, it has been pointed out that in the event sugar legislation is enacted, if the war is terminated and the emergency no longer exists after 1942, acreage limitations may be found necessary in 1943.

Please make the above information available to all sugar producers in your parish as soon as possible so that they may use their own judgment in planning their operations in accordance with the above.

G. J. Durbin
Administrative Officer in Charge

**PAUL, RICE & LEVY**
INCORPORATED

**Wholesale**
**INDUSTRIAL, MILL & MARINE SUPPLIES**

Day, Ra. 6123 Night, Fr. 2019

**501-505 Poydras St.**

**New Orleans, - - La.**

BETHLEHEM WIRE ROPE
O I C VALVES
GUILD & GARRISON PUMPS
INTERNATIONAL INDUSTRIAL PAINTS
CHESTERTON PACKING
K-TING MANILA ROPE
CONSOL OILS
VULCAN SOOT BLOWERS

The American Sugarcane League is sincerely proud of its contributions to a complete coordination of sugarcane and sugar research of the United States Department of Agriculture, the Louisiana State University Agricultural Experiment Station and the Louisiana sugar industry.

The following letter is highly significant and appropriately appreciated:

P. O. Box 470
Houma, Louisiana
October 13, 1941

Dean J. G. Lee, Jr.
College of Agriculture
Louisiana State University
Baton Rouge, Louisiana

Dear Dean Lee:

This letter is in response to one from Mr. W. G. Taggart dated October 8 requesting an expression to you in regard to the Louisiana State University Experiment Station program. I can of course speak only with reference to those phases of the program which are related to sugarcane research.

As to the coordination of efforts between the Louisiana Sugarcane Industry, the Louisiana State University and the U. S. Department of Agriculture in regard to research activities, I have already stated publicly and will repeat here that I doubt seriously that you could find anywhere an arrangement as effective as the prevailing one in harnessing the efforts of two publicly supported research institutions to the vital problems of an industry. Periodic meetings of the Contact Committee of the American Sugarcane League, which are usually well attended by workers from the two research institutions, afford an important means of discussing essential problems as they come up from time to time and of formulating plans for adequate research. As an illustration, the problem of testing methods used in other countries in the sterilization of seed cane with respect to chlorotic streak was thoroughly discussed at several of the meetings in the spring and summer of 1940. As a result a program of research was planned, in the formulating of which representatives of the Sugar Industry as well as research workers from the State University, and from the Department of Agriculture contributed substantially. Because of the urgency of the situation the Sugar Industry, through the American Sugarcane League supplied funds necessary to initiate the work promptly and to carry it

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

along until the necessary financial support could be provided for by the State Legislature. Right now a newly released variety is being widely distributed throughout the sugarcane district and the industry is being safeguarded against the incidental spread of chlorotic streak through information already obtained and through the machinery set up at the time the related research program was inaugurated.

Finally I cannot refrain from expressing gratitude for the excellent cooperation I received from State workers in connection with my own research activities which have to do specifically with the testing of sugarcane varieties. We meet frequently and freely exchange data as soon as available. We try to regulate and coordinate our activities in such a way as to provide for the maximum total results from resources placed at our disposal. Without the type of cooperativeness, broad mindedness and friendliness possessed by the members of your staff involved we could not hope to achieve the realization of such a goal.

Yours very truly,
George Arceneaux
Agronomist

# Recommendations for Reducing the Number of Overwintering Sugarcane Borers

(*E. K. Bynum, U. S. Department of Agriculture, Bureau of Entomology and Plant Quarantine*)

The sugarcane borer (*Diatraea saccharalis* (F.)) is the most important sugarcane pest found in the United States. Since there is a rather heavy borer infestation this year it seems certain that there will be large numbers of this pest going into hibernation this winter. Reducing the number of borers overwintering is one of the most satisfactory control methods for this insect; hence, sugarcane growers should make a special effort to accomplish this reduction. The value of having few borers overwinter was well illustrated in 1940 when the borer infestation was one of the lightest on record, as a result of the unusually cold winter of 1939-40, which reduced the overwintering population to about one-seventh of the number normally surviving the winter.

There are a few general plantation practices that can be modified to reduce the overwintering borer population and the initial spring infestation. A considerable reduction in the number of overwintering borers should result in at least reducing the amount of injury usually occurring during the spring and early summer.

During harvest, the cane should be cut somewhat lower than is the usual practice. Examinations of cane stubs over a period of several years very strongly indicate that the number of borers overwintering in stubs is large enough to make this an important source of spring infestation. The borers do not tend to bore down the cane stalk much below the surface of the soil, and thus it appears that the population could be reduced by cutting the cane near the soil surface. The joints of cane near the ground have the highest sucrose content, and this additional sugar would probably pay for the extra care in cutting.

The average number of cane stubs examined for borer infestation over a four-year period was about 6,700 per year, and the overwintering borer population was found to average approximately 36 per acre. Although the number of borers per acre overwintering in cane stubs varies considerably from field to field, this average is high enough to be of considerable importance.

The considerable quantity of cane left in the fields during harvest has an important bearing on the number of borers entering hibernation. A large percentage of the overwintering borers has been found in pieces of mature cane that were left during harvest. The salvage of this cane is profitable because of the sucrose obtained from it and also because of the reduction in the number of overwintering borers accomplished by its removal. This profit can be realized by exercising more care to prevent loss of cane during the regular harvesting operations, and by placing a reliable man behind the loader to pick up and pile the pieces left on the ground. These piles can then be collected by regular haulers or by use of a cart especially for the purpose. All scrap cane should also be removed from the plantation roads, railroads, around the hoist, and the factory. This important work is too often assigned to irresponsible boys or careless workers.

The principal source of spring infestation is the cane trash. This trash should be burned just as completely as possible, and a special effort should be made to do it during periods when the trash is dry enough to burn rapidly. A series of experiments was conducted on plots several acres in size during a period of several years to determine the value of burning cane trash for borer control. It was found that about one-third as many borers overwintered in plots where the trash had been thoroughly burned as on plots where it was left on the surface or covered with soil.

The burning of cane trash did not appear to reduce the *Trichogramma* population the following year. Collections of eggs laid by the borer moths on the growing cane were made in both the burned and unburned fields. The rate of parasitization was found to be as high in the burned fields as in the unburned throughout the entire growing season.

The young shoots produced during the fall from summer-planted cane usually contain many overwintering borers. These may successfully pass the winter if the shoots are not killed by frost or other means. An important source of spring infestation would be largely eliminated if the fall growth of shoots from summer-planted cane and early-harvested fileds, and the borers they contain, could be removed without very much cost.

# New Factor Welcomed Into Louisiana Sugar Fraternity

The Teche Sugars (Orange Grove Factory between New Iberia and Jeanerette, La.), controlled and managed by J. R. Roane Holdings, has been sold to the Orange Grove Sugar Co., Inc., with the following officers: Mr. A. G. Golodetz, President; Mr. Armand J. Scully, Vice-President, and Mr. Mark Ginzgerg, Secretary-Treasurer.

The Orange Grove Sugar Co., Inc., leased the Orange Grove Factory to Mr. J. R. Roane and Mr. J. W. Doll for the 1941-42 season. Thereafter the property will be operated by the new company.

LAMBORN & COMPANY, INC.
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

LE BOURGEOIS BROKERAGE CO.
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
HARRY L. LAWS & CO., INC.
Brokers and Distributors
SUGAR and MOLASSES
SUGAR FUTURES
American Bank Building New Orleans, La.

GAY, SULLIVAN & CO., INC.
SUGAR
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

STAUFFER, ESHLEMAN & CO., LTD.
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline
Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
CYANAMID
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

INDUSTRIAL LUBRICANTS

BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
STANDARD OIL CO. OF LA.

FOR SUGAR CANE FINANCING
STATE AGRICULTURAL CREDIT CORPORATION, INC.
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

AMERICAN MOLASSES CO.
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LEGardeur Frank Youngman
R. J. LEGARDEUR & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

PENICK & FORD, LTD., INCORPORATED
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

STANDARD SUPPLY AND
HARDWARE CO., INC.
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

E. A. RAINOLD, INC.
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

Chemistry Library,
Louisiana State University, La.

# THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

We stand for the encouragement of Home Industries as against foreign Competition

Vol. 20 NEW ORLEANS, LA., DECEMBER 1, 1941 No. 5

# House to Consider Extension of Sugar Act, With Amendments

*(By C. J. Bourg)*

The Fulmer Bill (H.R. 5988) having been reported favorably to the House of Representatives by the Committee on Agriculture, the next move will be to obtain a rule of procedure for immediate consideration by the House. Chairman Fulmer has requested such a rule. The Report of the Committee on Agriculture is so complete and explains the amendments so well, it is reproduced in full below:

REPORT

[To accompany H. R. 5988]

The Committee on Agriculture, to whom was referred the bill ( H. R. 5988) to amend the Sugar Act of 1937, as amended, and for other purposes, having considered the same, report thereon with a recommendation that it do pass, without amendment.

## General Statement

Quota control of the sugar industry has been in effect since 1934. The presently controlling legislation, the Sugar Act of 1937, as amended, expires on December 31, 1941. The bill (H. R. 5988) provides that the Sugar Act be extended for 3 years, with certain adjustments which experience and conditions arising out of the national emergency make advisable. However, the bill does not depart from the principles underlying the basic legislation dealing with sugar, and it has the support of agriculture, labor, and management in far the greater part of the sugar industry.

In the 7 years in which it has been effective, sugar control has demonstrated its value. The industry has been stabilized, the income of farmers and workers has been improved, and the system has been a protection to consumers. Since the enactment of the Sugar Act of 1937 the retail price of sugar to consumers has been lower than in any 4-year period in our history as a nation. The program has been effective in time of peace, and during a period of almost world-wide war. It is to continue these gains that the bill proposes to reenact the legislation with certain modifications.

The bill provides a slight increase of 4 percent in the basic quotas for the domestic sugar-beet area and the mainland cane-sugar area. These increases are scarcely more than token recognition of the fact that in each of the years since the passage of the Sugar Act of 1937 the beet-sugar area has exceeded its quota from beets produced on acreage allotted by the Secretary of Agriculture, and that the mainland cane area has exceeded its quota in all but one of those years. In the case of beet sugar the increase in quota amounts to 62,088 tons, and for the mainland cane area the increase is 16,880 tons. To accommodate these increases, the total minimum quota of all domestic sugar-producing areas is increased from 3,715,000 tons to 3,793,802 tons. There are no appreciable changes in the quotas for Hawaii, Puerto Rico or the Virgin Islands. The basic quotas for Cuba, the Philippine Islands, and foreign countries other than Cuba are reduced by 2.7 percent, which amounts to 50,719 tons for Cuba, 27,363 tons for the Philippines, and 702 tons for other foreign countries. The reduction in the quota of the Philippine Islands affects only the dutiable portion of that quota, does not involve the minimum duty-free quota provided in the Philippine Independence Act, and is a matter of no consequence to the Island producers since they

THE SUGAR BULLETIN

414 Whitney Bldg., New Orleans

Marcel J. Voorhies, Editor

Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
Subscription Price, 50 Cents per Year.

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE

**President, W. C. Kemper, Franklin, La.**

1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

**EXECUTIVE COMMITTEE**

W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

have never availed themselves of that portion of their quota on which duty must be paid.

Under the present act, a deficit in the Philippine quota can be reallocated only to foreign countries other than Cuba, although in case these areas are unable to supply the deficit the law provides no way by which it can be allotted to areas that are in a position to market additional quantities of sugar. Increasing difficulties and dangers of ocean shipping make it more than ever important that these provisions be revised. Thus the bill provides that any deficits in the Philippine quota shall be reallotted in this manner: First, the continental producers of sugar beets and sugarcane shall share proportionately in any deficits in the Philippine duty-free quota of refined sugar; second, foreign countries other than Cuba shall share proportionately the first 100,000 tons of any deficit in raw sugar; and, third, the balance of any deficit shall be shared proportionately by Hawaii, Puerto Rico, the Virgin Island, and Cuba. It should be noted that the allotment of 100,000 tons of a Philippine deficit to foreign countries other than Cuba is a greater amount of sugar than these countries have ever supplied to the United States in any year, with the exception of 1941.

The provision that only deficits in the Philippine duty-free refined-sugar quotas shall be allotted to continental areas has distinct potential advantages for insular producing areas and Cuba. Under the provisions of the bill, after the allotment of the first 100,000 tons to foreign countries other than Cuba, the balance of any deficit in Philippine raw sugars is to be allotted proportionately to Hawaii, Puerto Rico, the Virgin Islands, and Cuba. So long as the stringency in shipping continues, it is considered probable that substantial deficits will occur in the Philippine quota.

As a needed supplement to the present law, the bill provides that, if any foreign country other than Cuba is unable to fill its quota, the deficit shall first be allotted to those foreign countries which are able to market additional quantities of sugar, and any remainder to the domestic sugar-producing areas and Cuba on the basis of their effective quotas. The bill provides that any Philippine deficit so reallotted, excepting only that reallotted to the continental beet- and cane-sugar areas, shall not be marketed as refined sugar.

The bill amends section 207 (e) of the Sugar Act by reducing Cuba's direct-consumption sugar quota from 375,000 tons to 300,000 tons. This reduction has the practical effect of maintaining the present approximate quantity of raw cane sugar which can enter into continental United States each year for subsequent refining, and hence to maintain the present status of American workmen in the seaboard refining States of Massachusetts, New York, New Jersey, Pennsylvania, Maryland, Louisiana, Texas, and California. The reduction in the direct-consumption quota does not reduce Cuba's total quota under the figure prescribed by the bill. It merely means that 75,000 tons more of Cuban sugar shall be imported in raw form, rather than as direct-consumption sugar. Traditionally, Cuba has marketed her major production in the United States in the form of raw sugar, and sugar refining has never been an important industry in the island. In comparison with the growing and milling of sugarcane, sugar refining is an insignificant part of the economic life of the Cuban people.

On September 8 Secretary Wickard, in announcing his plans for the mobilization of agriculture for national defense, stated that no acreage limitations are contemplated for domestic sugar producers in 1942, thereby indicating the need for bringing about a larger production of sugar in these areas. Because of price increases in other crops competitive with sugar, the economic needs of sugar producers, and the rising costs of sugar production, the bill provides that the base rate of the conditional payment be increased from 60 to 80 cents a hundred pounds, raw value.

A graduated scale of reduction is provided in the payments to be made to producers of more than 350 tons of sugar. In this connection, it is important to observe that the increase in payment is not a burden on the consumer because, as the Secretary of Agriculture has often pointed out, so long as a quota system remains in effect taxes on sugar and conditional payments are not reflected in average retail prices. Moreover, the conditional payment is the only payment now made by the Federal Government on sugar crops.

The Sugar Act of 1937 defines liquid sugar as a product in which the soluble nonsugar solids are equal to 6 percent or less of the total soluble solids. At the time of the approval of the act it was con-

tended by certain importers of these products that liquid sugars containing more than 6 percent of soluble nonsugar solids could not be imported for use in human consumption. However, liquid sugar containing more than 6 percent soluble nonsugar solids has been imported, the volume of displacement of other sugar in 1941 being estimated at 40,000 tons. Liquid sugar which contains more than 6 percent of soluble nonsugar solids is charged against no quota and pays no tax, and clearly evades both the quota and tax provisions of sugar control. To prevent future evasion, the bill provides that liquid sugar include a product in which the soluble nonsugar solids are equal to 8 percent or less of the total soluble solids.

## Explanation of the Bill

### Quota Provisions

Section 1 (a) of the bill provides that, in the establishment of quotas for the various producing areas, the Secretary of Agriculture shall allot to domestic sugar producing areas 56.77 percent (but not less than 3,793,802 short tons) of the total amount of sugar estimated to be needed to meet the requirements of consumers in continental United States. The participation of each area in the domestic quota is as follows:

| | *Percent* |
|---|---|
| Domestic beet sugar | 42.49 |
| Mainland cane sugar | 11.52 |
| Hawaii | 24.72 |
| Puerto Rico | 21.03 |
| Virgin Islands | .24 |

Section 1 (b) of the bill provides that foreign countries and the Commonwealth of the Philippine Islands shall be allotted 43.23 percent of estimated consumption requirements (except that if the estimate of consumption is less than 6,682,670 short tons, these producing areas shall be allotted the amount by which the estimate of consumption exceeds 3,793,802 tons) on the following basis:

| | *Percent* |
|---|---|
| Commonwealth of the Philippine Islands | 34.70 |
| Cuba | 64.41 |
| Foreign countries other than Cuba | .89 |

It is provided also that the quota for the Commonwealth of the Philippine Islands shall in no case be less than the duty-free quota established by the provisions of the Philippine Independence Act, and that the quota for foreign countries other than Cuba shall be prorated among such countries on the basis of the revision of the quotas for these countries made in General Sugar Quota Regulations, Series 4, No. 1, issued December 12, 1936, pursuant to the Agricultural Adjustment Act, as amended.

### Proration of Deficits

Section 2 of the bill directs that the proration of Philippine deficits shall be made as follows:

1. The domestic sugar-beet area and the mainland cane-sugar area shall be allotted, on the basis of their effective quotas, an amount of sugar equivalent to any deficit in the quota of refined sugar which may be brought into continental United States, duty-free, from the Philippine Islands under the provisions of the Philippine Independence Act, as amended.

2. Foreign countries other than Cuba shall be allotted, on the basis of their effective quotas, an amount of sugar not in excess of 100,000 short tons.

3. Hawaii, Puerto Rico, the Virgin Islands, and Cuba shall be allotted, on the basis of their effective quotas, the amount of sugar by which the deficit exceeds 100,000 short tons. It is provided that no part of a Philippine deficit may be filled by direct-consumption sugar other than that allotted to the domestic beet-sugar area and the mainland cane-sugar area.

With respect to the proration of deficits in the quotas of foreign countries other than Cuba, the bill provides that if the Secretary of Agriculture finds that any foreign country other than Cuba is unable to market its quota for any calendar year, he shall prorate the deficit among such foreign countries other than Cuba as the Secretary determines are able to fill the same. The remainder, if any, is allotted proportionately to the domestic sugar-producing areas and Cuba.

Section 2 (d) continues the guaranty of the present law that the basic of a producing area shall not be reduced because of a proration of a deficit.

### Direct-consumption Sugar Quotas

Section 3 of the bill establishes the Cuban direct-consumption sugar quotas at 300,000 tons.

### Conditional Payments

Section 4 of the bill provides that the base rate of conditional payments shall be 80 cents per 100 pounds to producers of less than 350 tons of sugar. A graduated scale of reductions in payments is provided for producers of more than 350 tons.

### Liquid Sugar

Section 5 of the bill amends the definition of liquid sugar so that there will be included a product which contains up to 8 percent soluble nonsugar solids. This section similarly amends section 401 (b) of the Sugar Act, which relates to the definition of "manufactured sugar."

### Termination of the Act

Section 6 provides that the powers vested in the Secretary of Agriculture under the act shall terminate on December 31, 1944, except that the Secretary shall have power to make payments under title III of the Sugar Act for programs applicable to the crop year 1944, and previous crop years.

### Termination of Taxes

Section 7 provides that section 3508, Internal Revune Code, be amended so that no tax shall be imposed on the manufacture, use, or importation of sugar after June, 30 1945.

### Philippine Payment

Section 8 provides that the period within which refunds may be made of taxes collected on Philippine sugar be extended from June 30, 1942, to June 30, 1945.

## Changes in Existing Law

In compliance with paragraph 2a of rule XIII of the House of Representatives, changes in existing law made by the bill are shown as follows: Existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italics, existing law in which no changes is proposed is shown in roman:

(Public, No 414—75 Cong.)

Sec. 202. Whenever a determination is made, pursuant to section 201, of the amount of sugar needed to meet the requirements of consumers, the Secretary shall establish quotas, or revise existing quotas—

(a) For domestic sugar-producing areas by prorating among such areas [55.59] *56.77* per centum of such amount of sugar (but not less than [3,715,000] *3,793,802* short tons) on the following basis:

| Area | Per centum | |
|---|---|---|
| Domestic beet sugar | [41.72] | *42.49* |
| Mainland cane sugar | [11.31] | *11.52* |
| Hawaii | [25.25] | *24.72* |
| Puerto Rico | [21.48] | *21.03* |
| Virgin Islands | [ .24] | *.24* |

(b) For foreign countries, and the Commonwealth of the Philippine Islands, by prorating [44.41] *43.23* per centum of such amount of sugar (except, if such amount of sugar is less than 6,682,670 short tons, the excess of such amount over [3,715,000] *3,793,802* short tons) on the following basis:

| Area | Per centum |
|---|---|
| Commonwealth of the Philippine Islands | 34.70 |
| Cuba | 64.41 |
| Foreign countries other than Cuba | .89 |

In no case shall the quota for the Commonwealth of the Philippine Islands be less than the duty-free quota now established by the provisions of the Philippine Independence Act [,], *as amended*.

The quota for foreign countries other than Cuba shall be prorated among such countries on the basis of the division of the quota for such countries made in General Sugar Quota Regulations, Series 4, Number 1, issued December 12, 1936, pursuant to the Agricultural Adjustment Act, as amended.

Sec. 204. (a) The Secretary shall, as he deems necessary during the calendar year, determine whether, in view of the current inventories of sugar, the estimated production from the acreage of sugarcane or sugar beets planted, the normal marketings within a calendar year of new-crop sugar, and other pertinent factors, any domestic area, the Commonwealth of the Philippine Islands, or Cuba, will be unable to market the quota for such area. If the Secretary finds that any domestic area or Cuba will be unable to market the quota for such area for the calendar year then current, he shall revise the quotas for the domestic areas and Cuba by prorating an amount of sugar equal to the deficit so determined to the other [such] areas, on the basis of the quotas then in effect. Any portion of such sugar which the Secretary determines cannot be supplied by domestic areas and Cuba shall be prorated to foreign countries other than Cuba on the basis of the prorations of the quota then in effect for such foreign countries. If the Secretary finds that the Commonwealth of the Philippine Islands will be unable to market the quota for such area for the calendar year then current, he shall revise [the quota for foreign countries other than Cuba by prorating an amount of sugar equal to the deficit so determined to such foreign countries, on the basis of the prorations of the quota then in effect for such countries: *Provided, however*, That the quota for any domestic area, the Commonwealth of the Philippine Islands, or Cuba or other foreign countries, shall not be reduced by reason of any determination made pursuant to the provisions of this subsection.] *the quotas for domestic sugar-producing areas, for Cuba, and for foreign countries other than Cuba, by prorating an amount of sugar equal to the deficit so determined, as follows:*

*(1) To the domestic beet-sugar area and to the mainland cane-sugar area, on the basis of the respective quotas for such areas then in effect, an amount equivalent to such part, if any, of such deficit as the Secretary determines is due to inability to market in continental United States the amount of refined sugar permitted to be brought into continental United States, duty free, under the provisions of the Philippine Independence Act, as amended;*

*(2) To foreign countries other than Cuba, on the basis of the proration of the quotas for such foreign countries then in effect, an amount not in excess of 100,000 short tons of the remainder of such deficit, after giving effect to the foregoing subsection (a) (1);*

*(3) To Hawaii, Puerto Rico, Virgin Islands, and Cuba, on the basis of the respective quotas for such areas then in effect, the remander, if any, of the amount of such deficit in excess of 100,000 short tons, after giving effect to the foregoing subsection (a) (1): Provided, however, That no part of any such Philippine deficit so prorated may be filled by direct-consumption sugar except that part, if any, prorated pursuant to the foregoing subsection (a) (1).*

(b) If, on the 1st day of September in any calendar year, any part or all of the proration to any foreign country of the quota in effect on the 1st day of July in the same calendar year for foreign countries other than Cuba, has not been filled, the Secretary may revise the proration of such quota among such foreign countries, by prorating an amount of sugar equal to such unfilled proration to all other such foreign countries which have filled their prorations of such quota by such date, on the basis of the prorations then in effect.

*(c) If the Secretary finds that any foreign country other than Cuba will be unable to market any part or all of the proration to such foreign country for the calendar year then current, the Secretary may increase the quotas for other foreign countries, for the domestic sugar-producing areas and for Cuba, by prorating an amount of sugar, equal to the deficit so determined, as follows:*

*(1) To such foreign countries other than Cuba, on the basis of the proration of the quotas for such foreign countries then in effect, such portion of such deficit as the Secretary finds they will be able to market in the calendar year then current;*

*(2) To the domestic sugar-producing areas and Cuba, on the basis of the respective quotas for such areas then in effect, the remainder, if any, of such deficit.*

*(d) The quota for any domestic area, the Commonwealth of the Philippine Islands, or Cuba, or other foreign countries, shall not be reduced by reason of any determination made pursuant to the provisions of subsection (a) or subsection (c) of this section 204.*

Sec. 207.

* * * * *

(c) Not more than [three hundred and seventy-five thousand] *three hundred thousand* short tons, raw value, of the quota for Cuba for any calendar year may be filled by direct-consumption sugar.

Sec. 304. (a) The amount of the base rate of payment shall be [60] *80* cents per hundred pounds of sugar or liquid sugar, raw value.

* * * * *

(c) The total payment with respect to a farm shall be the product of the base rate specified in subsection (a) of this section multiplied by the amount of sugar and liquid sugar, raw value, with respect to which payment is to be made, except that [reductions] *reduction* from such total payment in accordance with the following scale of reductions:

| | *Reduction in the base rate of payment per hundredweight of such portion* |
|---|---|
| [That portion of the quantity of sugar and liquid sugar which is included within the following intervals of short tons, raw value: | |
| 500 to 1,500 | $0.050 |
| 1,500 to 6,000 | .075 |
| 6,000 to 12,000 | .100 |
| 12,000 to 30,000 | .125 |
| More than 30,000 | .300] |

| | *Reduction in the base rate of payment per hundredweight of such portion* |
|---|---|
| *That portion of the quantity of sugar and liquid sugar which is included within the following intervals of short tons, raw value:* | |
| *350 to 700* | *$0.05* |
| *700 to 1,000* | *.10* |
| *1,000 to 1,500* | *.20* |
| *1,500 to 3,000* | *.25* |
| *3,000 to 6,000* | *.275* |
| *6,000 to 12,000* | *.30* |
| *12,000 to 30,000* | *.325* |
| *More than 30,000* | *.50* |

Section 101. For the purposes of this Act, except title IV—

* * * * *

(f) The term "liquid sugar" means any sugars (exclusive of sirup of cane juice produced from sugarcane grown in continental United States) which are principally not of crystalline structure and which contain, or which are to be used for the production of any sugars principally not of crystalline structure which contain, soluble nonsugar solids (excluding any foreign substances that may have been added) equal to [6 per centum] *8 per centum* or less of the total soluble solids.

Sec. 401. For the purposes of this title—

* * * * *

(b) The term "manufactured sugar" means any sugar derived from sugar beets or sugarcane, which is not to be, and which shall not be, further refined or otherwise improved in quality; except sugar in liquid form which contains non-sugar solids (excluding any foreign substance that may have been added) equal to more than [6 per centum] *8 per centum* of the total soluble solids, and except also sirup of cane juice produced from sugarcane grown in continental United States.

The grades or types of sugar within the meaning of this definition shall include, but shall not be limited to, granulated sugar, lump sugar, cube sugar, powdered sugar, sugar in the form of blocks, cones, or molded shapes, confectioners' sugar, washed sugar, centrifugal sugar, clarified sugar, turbinado sugar, plantation white sugar, muscovado sugar, refiners' soft sugar, invert sugar mush, raw sugar, sirups, molasses, and sugar mixtures.

Sec. 513. The powers vested in the Secretary under this Act shall terminate on [December 31, 1941,] *December 31, 1944*, except that the Secretary shall have power to make payments under title III under programs applicable to the crop year [1941] *1944* and previous crop years.

Sec. 3508. TERMINATION OF TAXES

No tax shall be imposed under this chapter on the manufacture, use, or importation of sugar after [June 30, 1942] *June 30, 1945*.

# A Simplified Method of Making Theoretical Sugar Yield Calculations

*(In accordance with the Winter-Carp-Geerligs Formula[1])*

(Reprinted from the *International Sugar Journal*, 1935. 37, pp. 264-265)

*(By George Arceneaux[2])*

There is urgent need of a method permitting the rapid calculation of sugar yields, especially in cases where numerous routine determinations must be made, as for instance, in connection with replicated field tests. Commonly employed methods of statistical interpretation require that a separate determination as to indicated yield of sugar per ton of cane be made for each individual plot of an experiment, thus necessitating from 50 to 1000 or more sugar yield calculations in connection with an ordinary group test. The desirability of reducing the incidental routine work to its simplest possible form becomes apparent from a consideration of the number of such calculations involved yearly in an ordinary programme of investigation.

The basic data from which such sugar yield calculations are usually made consist of Brix and sucrose (polarization) determinations on juice from the first factory crushing or from some corresponding incomplete milling operation. The detailed steps of calculation involve first the conversion of observed anaylsis to the basis of completed milling by the application of "reduction factors" and then the substitution of the derived figures in an empirical formula. The assumed juice extraction values and other milling or recovery factors employed in such a formula are usually based on previously conducted comparative milling tests.

As an illustration, let us assume a crusher juice analysis of Brix 15·00 and sucrose 12·00 per cent., subject to the following factors: Brix reduction factor =0·985; sucrose reduction factor=0·970; assumed complete milling juice extraction=76 per cent. ; assumed boiling house efficiency number=100 per cent. The steps involved in the detailed calculations are as follows:—

(1) $15{\cdot}00 \times 0{\cdot}985 = 14{\cdot}775$
(2) $12{\cdot}00 \times 0{\cdot}970 = 11{\cdot}64$

The juice analysis on the basis of complete milling is therefore determined to be as follows: Brix= 14·775; sucrose=11·64; purity=78·782. Substituting these values and previously mentioned factors in the commonly employed Winter-Carp-Geerligs formula, we have:—

(3) Pounds of 96° sugar per ton of cane=

$$\frac{(2000)\ (0{\cdot}76)\ (11{\cdot}64)\left(1{\cdot}40 - \frac{0{\cdot}40}{0{\cdot}78782}\right)}{0{\cdot}96} = 164{\cdot}4$$

It can be shown that the above calculations may be reduced to the following simple operation:—

(4) Pounds of 96° sugar per ton of cane = *(sx)* minus *(By)*, in which

$s$ =per cent. sucrose value of crusher juice=12·00
$x$ =calculated factor=21·5017
$B$=Brix of crusher juice=15·00
$y$ =calculated factor=6·2383

(12·00) (21·5017) minus (15·00) (6·2383)=164·4

The values of $x$ and $y$ obviously change with variations in the milling factors involved. Values for $x$ and $y$ corresponding to any given set of milling conditions may be calculated from the formulae:—

(5) $x = (29{\cdot}16667)\ (a)\ (c)\ (d)$
(6) $y = (8{\cdot}33333)\ (b)\ (c)\ (d)$

in which

$a$ = Sucrose reduction factor
$b$ = Brix reduction factor
$c$ = Assumed juice extraction per cent. cane on the basis of complete milling
$d$ = Boiling house efficiency number.

As an illustration, using milling factors assumed in the above given example, we have:—

$x$=(29·16667) (0·970) (0·76) (1·00) = 21·5017
$y$= (8·33333) (0·985) (0·76) (1·00) = 6·2383

The above method of deriving $x$ and $y$ factors is based on the following considerations: According to the Winter-Carp-Geerligs formula it is assumed that each pound of non-sucrose solids in the juice will retain 0·4 of a pound of sucrose. In its simplest form, therefore, the formula could be expressed as follows:—

(7) $S$ = ($e$) minus [(0·4) ($f$ — $e$)]

in which

$S$ = pounds of recoverable sucrose in the juice;
$e$ = pounds of sucrose in the juice; and
$f$ = pounds of total solids (Brix) in the juice.

Above given basic values for determining $x$ and $y$ as per equations 5 and 6 (29·16667 and 8·33333) are derived as follows: The number of pounds of 96° sugar in 1 ton of cane with 1 per cent sucrose in juice subject to the following milling factor — reduction factor = 1·00; boiling house efficiency number = 100 per cent (1·00); and juice extraction the impossible value of 100 per cent (1·00), may be shown to be 20·8333+.

According to the Winter-Carp-Geerligs formula, under above-mentioned hypothetical conditions, 1 per cent of non-sucrose in the juice from 1 ton of cane will retain in solution 8·333+ pounds of 96° sugar. Substituting these values in equation 7 expressed on the basis of 96° sugar, we have the following in which $S^1$ = pounds of 96° sugar per ton of cane; $s$ = per cent sucrose value: $B$ = Brix.

(8) $S^1 = s\ (20{\cdot}8333+)$ minus [($B$ — $s$) (8·333+)]
(9) $S^1 = s\ (20{\cdot}8333+)$ minus [$B$ (8·333+) minus $s$ (8·333+)]
(10) $S^1$ = [$s$ (20·8333+) plus $s$ (8·333+)] minus $B$ (8·333+)
(11) $S^1 = s\ (29{\cdot}16667)$ minus $B$ (8·3333)

Variations in per cent juice extraction values B.H.E. number values, and reduction factors from the assumed 1·00 will in each case proportionately reduce the value of $x$ and $y$ below basic values given in equation 11, hence equations 5 and 6 for the derivation of $x$ and $y$ values corresponding to any set of milling conditions. These factors have the advantage of being directly applicable to the original Brix and sucrose determination in a very simple process of calculation.

As an additional illustration, given the following milling factors: Brix reduction factor = 0·973; suc-

[1]H. C. Prinsen Geerligs, "Chemical Control in Use in the Java Sugar Factories," 1904, 6, pp. 437-444. Reprinted in "Methods of Chemical Control in Cane Sugar Factories," (1905).

[2]Agronomist, Division of Sugar Plant Investigations, Bureau of Plant Industry, United States Department of Agriculture.

rose reduction factor = 0·958; juice extraction = 78 per cent; boiling house efficiency number = 0·97.

$x$=(29·16667) (0·958) (0·78) (0·97) = 21·1407
$y$= (8·33333) (0·973) (0·78) (0·97) = 6·1348

Under such conditions the indicated yield of 96° sugar per ton of cane showing the following crusher juice analysis: Brix 18·96; sucrose 16·71 per cent would be: (16·71) (21·1407) — (18·96) (6·1348) = 236·9.

Factors $x$ and $y$ for computing the indicated yield of 96° sugar from juice analyses on the basis of completed milling may be likewise determined, reduction factors being merely left out of the equations 5 and 6.

The identical $x$ and $y$ values would, of course, be used in a series of calculations based on the same milling and recovery factors. An ordinarily experienced operator can make approximately 150 such routine sugar calculations per hour with a modern electrically-operated calculating machine.

While the writer's experience in the use of such factors has been entirely in connection with experimental agronomic work, it is believed that similar factors based upon local milling and recovery data could be advantageously used in connection with many routine factory calculations.

---

# Machinery for Sugar Cane Production*

*By Harold T. Barr, Member A.S.A.E.*

Sugar cane in Louisiana is grown from the full-length stalks planted in rows spaced 6 ft. apart, and normally follows a crop of soybeans or soybeans and corn. The corn is harvested in August and the soybeans and corn stalks are turned under to add humus and nitrogen for the following cane crop.

The greater part of the land preparation is done with a special sugar cane tractor of about 30 h.p., with a direct attached row-reversing plow. A typical row-reversing plow is made up of a 22-in. double moldboard plow in front, followed by a 10-in. right and left-hand moldboard set 22 to 28 in. apart, and a 14-in. double moldboard in the back set 4 to 8 in. deeper than the front double moldboard to completely break out the row. The ridges thus formed vary from 12 to 18 in. in height.

In September these ridges are opened with a double moldboard plow, and the stalks of sugar cane are planted. The stalks are cut and hauled in carts or wagons to the fields opened for planting. The wagon wheels have the same spacing as the rows and follow the middles. In small operations two men follow a cart, pulling out the stalks and placing them in the furrows. On larger operations one wagon will be used for three to five rows with a crew of negro men and women following, placing the stalks straight in the rows. Stalks are lapped half and half. Covering is generally done with a disk cultivator. In dry seasons soil packers or rollers are used to compact the soil around the seed canes. Some planters add a short roller back of the disk on the cultivator to cover and compact in one operation. From this one planting the general practice in Louisiana is to get a plant cane crop the following fall and then a first and second year stubble crop, or three crops from one planting. In some tropical countries it is possible to secure 20 to 25 crops from one planting. However, in recent years the tendency is to a shorter rotation.

With favorable weather the cane will sprout and send up a good many shoots before December. Some years these shoots will grow on through the winter, but are generally frosted back to the ground. In February and March the dirt is plowed from each side or "off-barred" from the side of the cane. This allows the sun to warm up the soil and plants and increases the rate of sprouting. Walking turning plows were formerly used for this operation. Today the high-clearance cane tractor equipped with a direct-connected two-row frame and four sets of three disks each or right and left-hand moldboard plows of 10 in. are being used successfully in the state for off-barring.

There are several optional operations at this time of the year that may or may not be performed depending upon the conditions of the crop.

Stubble diggers are utilized for loosening the dirt around the stubble pieces when the soil has become very compact and germination is delayed and as an aid for hand hoe gangs.

Stubble shavers, power-driven flat disks revolving in a horizontal plane, are generally utilized for cutting the old stubbles about an inch below the surface of the ridge. This operation cleans off the top of the row and aids in getting the sun on the stubbles. Plant cane scrapers, wide flat sweeps, are used for removing the excess dirt over the seed pieces and any grass and weeds that may be directly in the top of the ridge.

Hand chopping or hoeing of the weeds in the cane line and removal of dirt directly in the cane line is still practiced to a large extent. However, several machines have been brought out in the last few years for performing this operation. Hand hoeing is performed by gangs of negro men and women at a cost of approximately one dollar per acre. With a tractor, mechanical hoe, and two men, the field can be covered at a cost of approximately twenty-five cents per acre. These mechanical hoes have two sets of curved blades revolving in a horizontal position cutting into the row from each side and doing a remarkably good job of killing the weeds and Bermuda grass.

In April nitrogen fertilizers are applied to each side of the cane row and the dirt moved back into the off-barred furrow. The fertilizer is applied with two-wheel cart distributors, or by tractors. A common practice today is to mount two large fertilizer hoppers on a general-purpose cane tractor and fertilize and "dirt-back" in one operation.

As the cane grows, weeds must be controlled and the row gradually built up. For animal power the between-row walking cultivator equipped with two gangs of large size turning shovels is in use on small farms. On slightly larger plantings a straddle-row cultivator equipped with shovels or spring teeth is favored. Straddle-row riding cultivators with disk tools far outnumber either of the above types of cultivators. The high-clearance sugar cane tractors with two-row cultivating units have increased the acreage per worker many times. A three-row tractor disk cultivator developed by an ingenious Louisiana farmer is capable of cultivating as high as 90 acres per 10-

*Paper presented before the Power and Machinery Division at the annual meeting of the American Society of Agricultural Engineers at Knoxville, Tenn., June 1941. Author: Associate agricultural engineer, Louisiana State University.

hr. day. A local manufacturer is now building this implement upon order.

The harvesting of sugar cane generally starts about October 15th and extends through the following 80 to 100 days. Cutting the cane by hand with a cane knife, stripping the leaves, removing the tops, and throwing the stalks into piles has been the general practice. The average negro laborer will cut and pile 1½ tons per day. Plenty of labor, a low scale of wages, and certain political or governmental principles involving the employment of labor have each retarded the use of harvesting machines. Increasing labor troubles and higher wages are causing more interest in the mechanical harvesting of sugar cane.

Four different manufacturers of mechanical cane harvesters each had machines in operation in the Louisiana cane fields during the fall of 1940. Three of these are built as attachments for a sugar cane tractor, handling one row at a time. These machines show promise, and with certain refinements each company will be operating one or more machines in the cane fields this fall. The fourth manufacturer had 26 machines in the field this past fall. The latter machine requires three men to operate it and has been operated 24 hr. per day by several plantations with just enough time out to grease, refuel, and change operators. This same manufacturer has a lighter one-row harvester ready for trials.

The sugar cane stalks are picked up by small portable cane loaders (or by hand), loaded into carts, and hauled to a derrick for transfer into trucks or railroad cars, or taken directly to the sugar cane mill. Transportation by barges on the canals and bayous of the lower Gulf district is utilized wherever possible as a cheap transportation method. With the development of the rubber-tired cane tractor and two-wheel rubber-tired cane carts the hauling is now commonly done with a 30-h.p. model and two carts, or a smaller tractor and one cart. The loads of sugar cane vary from 1½ to 4 tons, depending upon the type of equipment available, and often upon the weather. After a rainy period of 10 to 50 days during the time of cane harvest, it is common to see the tractors and wagons cutting from 10 to 20 in. deep into the soft fields or dirt field roads. High-gear tractors with two carts attached and capable of making 10 to 15 m.p.h. are used to some extent for hauls of 2 to 10 miles in the fields and along the highway. The use of truck-trailer units for hauls of from 2 to 25 miles is increasing each year. These truck-trailer units haul loads varying from 6 to 16½ tons.

The present-day cane tractor and particularly all of our sugar cane implements have been developed by local men and then taken over by one of the farm machinery manufacturers. One manufacturer, however, supplies only the tractor while a local machine shop fabricates the implements to go with it. Machinery for sugar cane must be built to withstand rough usage from negro labor and heavy soils. The farmer, however, should not be expected to maintain a machine shop and a welder, and then furnish each tractor operator with a pocketful of bolts in order to keep his machines going.

BE SURE WITH PURE
By Using
Pure-Pep Gasoline Tiolene Motor Oil
Yale Tires
THE PURE OIL COMPANY
District Office: Abbeville, La.

Squier Sugar Machinery
MILLS and CRUSHERS
AIR-DRAULIC ACCUMULATORS
JUICE HEATERS
EVAPORATORS, CAST IRON AND WELDED PLATE
PANS, CAST IRON AND WELDED PLATE
CRYSTALLIZERS
HIGH SPEED CENTRIFUGALS
SUGAR DRYERS
PUMPS AND FANS
COMPLETE SUGAR FACTORIES
The Geo. L. Squier Mfg. Co.
462 Broadway Buffalo, N. Y.

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

**LAMBORN & COMPANY, INC.**
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

**LE BOURGEOIS BROKERAGE CO.**
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
**HARRY L. LAWS & CO., INC.**
Brokers and Distributors
SUGAR and MOLASSES
**SUGAR FUTURES**
American Bank Building New Orleans, La.

**GAY, SULLIVAN & CO., INC.**
SUGAR
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

**STAUFFER, ESHLEMAN & CO., LTD.**
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
**CYANAMID**
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

**INDUSTRIAL LUBRICANTS**

BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
**STANDARD OIL CO. OF LA.**

FOR SUGAR CANE FINANCING
**STATE AGRICULTURAL CREDIT CORPORATION, INC.**
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

**AMERICAN MOLASSES CO.**
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LEGardeur Frank Youngman
**R. J. LEGARDEUR & COMPANY**
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

**PENICK & FORD, LTD., INCORPORATED**
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

**STANDARD SUPPLY AND HARDWARE CO., INC.**
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

**E. A. RAINOLD, INC.**
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

Chemistry Library,
Louisiana State U
University, La.

# THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

We stand for the encouragement of Home Industries as against foreign Competition

Vol. 20 NEW ORLEANS, LA., DECEMBER 15, 1941 No. 6

## To All Agricultural Workers and Farmers of the State of Louisiana:

**America has been attacked. War has been declared. Agriculture is the basic industry on which our Army, Navy, Industry and Labor depend for food and essential supplies.**

**I want to appeal to you to produce as you have never produced before to the end that food and other essential supplies may be kept flowing in a steady stream to our own forces and to our allies. Winning the war is the paramount issue, and let's do our part.**

**Sincerely yours,**
**J. G. LEE, JR.,**
**Dean, College of Agriculture**

The above statement by the Dean of the College of Agriculture at the Louisiana State University, which is in line with the national agriculture production program outlined by the Secretary of Agriculture, prompts us to suggest that the Louisiana sugar producers must make every attempt to grow all of the food and feed necessary on their own farms and as much over those requirements as possible. By so doing, they will avoid the necessity of having agricultural producers draw on the production of other agricultural producers for products which they can grow themselves and which are, and will be, sorely needed for the groups who are not in a position to produce food and feed.

We think it is also advisable for the Louisiana sugar cane producers to retain for cultivation every acre of good stubble cane, whether it be first, second, third or fourth year stubble. It is imperative that we produce as much sugar cane as our present milling capacity can take care of.

LOUISIANA STATE UNIVERSITY LIBRARY

THE
SUGAR BULLETIN
414 Whitney Bldg., New Orleans
Marcel J. Voorhies, Editor
Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn
Subscription Price, 50 Cents per Year

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE
President, W. C. Kemper, Franklin, La.
1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

EXECUTIVE COMMITTEE
W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

# The Domestic Sugar Industry Co-Operates in Defense

*(By C. J. Bourg)*

The declarations of war by Congress during the past week have created an almost spiritual tenseness in Washington, so that all decisions are related to considerations of national defense and a united people. The overwhelming support accorded the Fulmer Bill (H. R. 5988) in the House of Representatives less than two weeks ago had encouraged the domestic sugar industry to the expectancy that the Senate would similarly recognize the need for granting the amendments upon which the industry had substantially united. Such action would have established the federal policy of encouraging domestic expansion of production and supplies in normal as well as emergency situations.

In a practical sense, the effect of the war declarations, in matters concerning sugar, has been primarily to emphasize the realization that quotas will not be restrictive during the emergency, because every pound of sugar which can be produced or brought into the United States will be needed to supply the needs of American consumers, including national defense requirements, for the duration of the war and a reasonable period thereafter when adjustments will take place in the markets of the world. Instead of limitations in acreage and marketing allotments, the program of these times will be all-out production and distribution. If restrictions in marketing should come, they are more likely to be in the form of consumption allocations (which is a modified form of rationing).

OPM announced late Saturday that wholesalers, jobbers and industrial users of sugar should freeze sugar stocks in excess of 60-day supply and should not accept delivery of additional sugar if, upon acceptance of delivery, his stock of sugar would exceed a 30-day supply, based upon OPM order that no such wholesaler, jobber or industrial user shall accept delivery of more sugar during any one month than he received during the corresponding month in 1940. Instructions will be sent direct from OPM to importers, refiners and processors. This means the immediate application of the allocations program.

With these thoughts in mind, it became clear that the appropriate legislation with respect to the sugar program would be to maintain the quota system through the extension of the Sugar Act during the period of national emergency and to provide incentives for the expanding production of sugar to meet all requirements of national defense and civilian supply. However justified one might feel in advocating corrections in the quota provisions of the Sugar Act, including the re-allocations of deficits, the existence of a war which had assumed world proportions, involving all Nations, left no doubt that the controversial measures should be excluded; and all considerations should be subordinated to the national objective of procuring all supplies available, and to become available, so that rationing and excessive prices might be avoided, while all the needs of the Nation in sugar and its by-products might be satisfied.

Accordingly, and unitedly, the Senators from the sugar-producing States accepted the proposal of the representatives of the domestic sugar industry that the provisions of the Fulmer Bill should be reduced to the minimum essentials. In this way all other proposals which might have become controversial, whether justifiedly or unjustifiedly, could be eliminated in the interest of national and international unity in the Western Hemisphere. The important consideration had become one of maintaining the highest volume of sugar for consumption requirements at the lowest price possible under war conditions.

A substitute Bill was, therefore, proposed to the Finance Committee by Senators O'Mahoney and Ellender, which was adopted by the Committee. The provisions of the substitute Bill are as follows:

SUBSTITUTE BILL FOR H. R. 5988

To amend the Sugar Act of 1937, as amended, and for other purposes.

Be it enacted by the Senate and House of representatives of the United States of America in Congress assembled, That section 513 of the Sugar Act of 1937, as amended (relating to termination of powers of the Secretary of Agriculture under the Sugar Act), is amended to read as follows:

"Sec. 513. The powers vested in the Secretary under this Act shall terminate on December 31, 1944, except that the Secretary shall have the power to make payments under title III under

programs applicable to the crop year 1944 and previous crop years."

Sec. 2. (a) Subsection (a) of section 304 of the Sugar Act of 1937 is amended to read as follows:

"Sec. 304. (a) The amount of the base rate of payment shall be 80 cents per hundred pounds of sugar or liquid sugar, raw value."

(b) Subsection (c) of Section 304 of the Sugar Act of 1937 is amended to read as follows:

"(c) The total payment with respect to a farm shall be the product of the base rate specified in subsection (a) of this section multiplied by the amount of sugar and liquid sugar, raw value, with respect to which payment is to be made, except that reduction shall be made from such total payment in accordance with the following scale of reductions:

| "That portion of the quantity of sugar and liquid sugar which is included within the following intervals of short tons, raw value | Reduction in the base rate of payment per hundredweight of such portion |
|---|---|
| "350 to 700 | $0.05 |
| 700 to 1,000 | .10 |
| 1,000 to 1,500 | .20 |
| 1,500 to 3,000 | .25 |
| 3,000 to 6,000 | .275 |
| 6,000 to 12,000 | .30 |
| 12,000 to 30,000 | .325 |
| More than 30,000 | .50" |

Sec. 3. Section 3508 of the Internal Revenue Code (relating to termination of taxes under the Sugar Act) is amended to read as follows:

"SEC. 3508. TERMINATION OF TAXES.

"No tax shall be imposed under this chapter on the manufacture, use, or importation of sugar after June 30, 1945."

Sec. 4. Section 503 of the Sugar Act of 1937, as amended (relating to the Commonwealth of the Philippine Islands), is amended by striking out "June 30, 1942" and inserting in lieu thereof "June 30, 1945."

Sec. 5. Section 301 (a) of the Sugar Act of 1937, as amended (relating to labor requirements with respect to conditional payments), is amended by striking out the words "in the 1937, 1938 and 1939 crops" at the end thereof.

Sec. 6. Section 307 of the Sugar Act of 1937, as amended, is amended to read as follows:

"Sec. 307. This title shall apply to the Continental United States, Territory of Hawaii, Puerto Rico, and the Virgin Islands."

There are six amendments proposed, although the changes in the Sugar Act would be four. The three-year extension is the subject of three amendments, to cover powers, tax, and Philippine refund.

The first amendment extends the powers of the Secretary of Agriculture for three years.

The second amendment provides an incentive for greater production in the form of a base rate of payment at 80c per cwt. of sugar, instead of 60c. The effect of this amendment, expressed in terms normally used by sugarcane growers, will average to the growers a payment of approximately $1.33 per ton of sugarcane, instead of the $1.00-per-ton average of the last three years. It is important to note that the total collections from the tax on sugar have always been greater than the total payments made to growers; and this balance in favor of the United States Treasury will continue, even under the increased base rate. In other words, the sugar industry will finance its own program and leave a profit for the Government.

The third amendment extends the ½c tax on sugar for three years.

The fourth amendment extends the refund of the tax collected on Filipino sugar to the Philippine Islands for three years.

The fifth amendment extends to future crops the Ellender Amendment adopted by Congress in 1939, providing for a penalty on child-labor violations instead of requiring the forfeiture of all conditional payments. The effect is to make the penalty commensurate with the offense. In this manner, the grower who may be deceived into employing a young man for a day or two through misrepresentation as to age, will not suffer as severe a penalty as a grower who would knowingly violate the child-labor provisions over a period of weeks or months.

The sixth amendment extends the conditional payments to growers of sugarcane in the Virgin Islands. Up to this time these growers have not been eligible for such payments.

## Administrative Amendments

The Secretary of Agriculture, in his report on the Fulmer Bill, recommended to the Senate Finance Committee the adoption of what he termed non-controversial administrative amendments. The purport of these changes was to facilitate the administration of the Sugar Act and also to make it possible to eliminate certain hardships which were not anticipated in 1937. The Committee took the position that full opportunity should be given to the domestic sugar industry to examine and understand the proposed administrative amendments, so that they could be certain that the changes are, in fact, non-controversial as between the industry and the Department of Agriculture. It has been suggested informally that, should the Department of Agriculture and the domestic industry get together on amendments of a non-controversial nature, the Committee might receive favorably such recommendations for the improvement of the mechanics of the administration of the sugar program. The amendments proposed by the Department of Agriculture are being referred to the Legislative Committee of the different areas, and already some informal discussions have been held.

We consider this procedure very desirable. Our experience has been that each time a general revision or extension of the Sugar Act has been under consideration by Congress, there are always major problems of quotas and price control which overshadow the other provisions, and the tendency has been to pass over proposals of minor importance. By confining the discussions to matters which are not controversial among areas or branches of the industry, there are bound to be practical results coming from a sincere attempt to make the program more workable.

# Secretary of State Outlines His Attitude

Dec. 8, 1941.

The Honorable Walter F. George,
Chairman, Committee on Finance
United States Senate

My dear Senator George:

I have received your letter of November 10, 1941, enclosing for my consideration a copy of a bill (S. 2041) to amend the Sugar Act of 1937 and requesting that I submit a report thereon at the earliest possible date. Since the bill has an important bearing on our foreign relations, I am glad to comment on it.

When viewed against the background of history of sugar legislation in the United States since 1934, and of the present highly critical international situation, legislation such as that proposed seems to be singularly inappropriate. The sugar legislation now in effect in the United States was enacted to afford relief from a distressing problem of sugar surplusses; that problem does not exist today. At a time when there does not appear to be any compelling reason for new sugar legislation the bill would, among other things, alter the present basic quotas at the expense of offshore areas. You will recall that the President, in a letter of April 11, 1940 to the Chairman of the House Agricultural Committee commenting on a number of somewhat similar sugar bills which had been introduced in the Seventy-sixth Congress, stated:

> "... some of these bills would discard the established basis of distribution of quotas among the various sugar-producing areas that was carefully developed by the Congress after considerable labor. In its report to the Congress in 1937, your Committee stated that the quotas had been arrived at 'after careful consideration of the history of production in each area and its present and future capacity to market'. I believe that we all appreciate readily the natural desire of each producing area to enlarge it sshare of the market, but it would be most difficult to justify an abandonment of the existing distribution of quotas in favor of a new and arbitrary basis of allotments."

In that same letter to the Chairman of the House Agricultural Committee the basic problem of good government inherent in sugar legislation was defined by the President as the balancing, practically and fairly, of the directly conflicting interests of the various groups of American citizens concerned: the producers of sugar and the producers of export commodities, the farmers and the processors, the employers and labor, and the industry as a whole and consumers and taxpayers. Such a balance is of course extremely difficult to achieve even with the utmost good will on the part of all concerned. However, the inherent difficulty has been enhanced by the fact that sugar legislation introduced in Congress in recent years has almost invariably proposed concessions to certain groups of American citizens at the expense of other groups of American citizens and of hemispheric unity.

As has occurred on several occasions in the past, it is proposed to use this bill, which is an agricultural bill, for the purpose of granting increased protection to the mainland sugar refining industry. When the Sugar Act of 1937 was being considered, I pointed out in a letter to the Chairman of your Committee the reasons why limitation of the amount of direct-consumption sugar which may enter from Cuba is open to serious objection. Under present emergency conditions, it is even more questionable whether the continuation of such restrictions is wise. The bill under reference would not only continue the restrictions contained in the present law but would restrict still further the importation of direct-consumption sugar from foreign countries under any reallocation they might receive as a result of deficiencies in the Philippine quota.

From the standpoint of our foreign relations, the chief objections to S. 2041 are the adverse effects it would have on Cuba, the British West Indies and the full-duty countries. Cuba would be injured by provisions substantially reducing its direct-consumption quota, decreasing its basic quota and subjecting to quota restrictions certain grades of edible molasses not now subject to quota restrictions. These adverse changes, which would be effective at least until January 1, 1945, would constitute a violation of the spirit, if not the letter, of our existing trade agreement with Cuba. The provision in the bill creating the possibility that Cuba may supply additional sugar to the United States in the event deficiencies in the Philippine quota are unusually large would not justify a worsening of Cuba's position as a supplier of sugar to the United States in more normal times contrary to the basic principle on which the legislation now in effect was based.

The British West Indies are adversely affected because certain grades of edible molasses normally imported therefrom would apparently be subjected to an absolute embargo contrary to our trade agreement with the United Kingdom.

The full duty countries would have their position worsened because under present circumstances they would receive much less favorable treatment in respect of reallocation of the deficiencies in the Philippine quota. In addition, they would suffer a reduction in their basic quotas. This reduction, although small, would constitute a violation of the International Sugar Agreement.

In view of the above-mentioned objectionable features contained in the bill and the adverse effects which its enactment could not fail to have on the efforts of this Government to promote the closest possible cooperation between the nations of this hemisphere, I strongly recommend that it be not enacted, regardless of whatever good features it may contain.

I trust that any sugar legislation which may be enacted will conform to the basic principles underlying existing sugar legislation, avoid violation of our international obligations, and help rather than hinder our efforts to strengthen the defense of this Hemisphere.

This letter has been submitted to the Director of the Budget who states that the proposed legislation is not in accord with the program of the President.

Sincerely yours,

(S) CORDELL HULL.

# Secretary of Agriculture Outlines His Attitude

Hon. Walter F. George, Chairman
Senate Finance Committee December 9, 1941

Dear Senator George:

Reference is made to your request for the views of this Department on S. 2041, a bill to amend the Sugar Act of 1937, as amended, and for other purposes.

Section 513 of the Sugar Act of 1937 provides that the powers vested in the Secretary of Agriculture under that legislation shall terminate on December 31, 1941, except that Title III of the Act authorizes the Secretary to make payments under programs applicable to the crop year 1941 and previous crop years. However, the excise taxes with respect to sugar are continued until June 30, 1942.

The general effect of these varying termination dates, were no legislative action taken, would be to create an unbalanced situation in the sugar industry. The payments provided for under the Sugar Act would be made on varying portions of the sugar marketed by the respective areas during the calendar year 1942 while the excise tax on sugar would be collected on all direct-consumption sugar manufactured prior to June 30, 1942. Therefore, either the elimination of these inequalities or the accomplishment of the principal objective of the Bill S. 2041 to continue the Sugar Act for a period of years would appear to be desirable. The bill, however, goes beyond continuation of the Sugar Act of 1937 and proposes to modify certain provisions of the legislation in a manner which does not accord with the policies of the Administration.

These provisions of the bill which would reduce the quotas of neighboring countries, further restrict the importation of refined sugar, and exclude certain types of molasses from entry into the United States are in conflict with our policy of hemispheric cooperation. I believe that adherence to this policy is of the utmost importance for the consolidation of this hemisphere against the forces of aggression and totalitarianism. I am advised that the Secretary of State is furnishing the committee a complete analysis of these conflicts.

The bill also would alter the basic division of our sugar market among the various domestic areas in a manner which would be detrimental to Hawaii and Puerto Rico. Likewise, these areas of the United States which lack the protection of statehood would be treated differently than other domestic areas in the allotment of deficits. The Congress has charged the Department with the promotion of agriculture and of the welfare of farmers in all parts of the United States. The production of sugar is the most important source of farm income in Hawaii and Puerto Rico, areas which are among our most stable and dependable sources of supply. I am opposed to these provisions of the bill because I believe their enactment would be contrary to the principles of government and citizenship upon which this country was founded and which today are being challenged by forces which avow world conquest and the subjugation of minorities.

Certain transitory circumstances connected with agricultural conditions in several of the sugar producing localities tend to justify an increase in the basic rate of payment to small producers for the 1942 and possibly subsequent crops as a part of an emergency policy. If made permanent, however, such an increase in view of the tax features of the bill would establish a discrimination against California, Florida, Hawaii, Louisiana, and Puerto Rico. It also would place some processors in a more advantageous position than others with respect to acquisition of raw material. I recommend, therefore, that the proposed increase in the basic rate of payment be made operative only so long as the present defense emergency continues. I also recommend that, since the increased payments proposed in the bill are not confined by the proposed scale to the level of production typical of small farms, the Committee re-examine it with a view to further limiting its application.

The Department believes that it would be desirable in writing any sugar bill, for the Committee to include certain non-controversial amendments which would be valuable in meeting emergency situations that may arise in this industry as a result of the war effort, as well as in handling certain problems largely of an administrative character. These proposals include provision for the suspension by executive order of the operation of any title or any section of any title should the continued operation of such provision impede the efficient use of marine and land transportation facilities or otherwise conflict with the national interest. The modifications proposed would also clarify and expand the existing provision with respect to allocations and make it possible to meet the adverse effects which may, in the case of sugar, flow out of the application of certain provisions of the proposed price control legislation should it be made operative.

During the past few years it has been found that the penalty for employment of child labor, namely, complete forfeiture of the conditional payments, is sometimes excessive. The problem was handled as an emergency by a special amendment which was made retroactive as to certain crops but not made forward in its application. We suggest revision of section 301 (a) so that the payment otherwise due a producer shall be reduced at the rate of $15.00 for each instance of non-compliance. A similar problem with respect to compliance with the proportionate share requirement, which was met by a discontinuing amendment in the case of the 1940 crop period, may again arise. It is recommended that a system of reduced payments be substituted in lieu of forfeiture of the total payment in those cases in which the proportionate share acreage or production is exceeded, and that as a complementary feature the phrase "to which proportionate shares determined pursuant to the provisions of subsection (b) of section 302, pertained" be deleted from section 205(a) of the Act and that provision be made for the consideration of inventories in arriving at allotments. It is further suggested that the provisions relative to public hearings with respect to determination of minimum wages and fair prices be made optional in their application. The attached drafts of proposed amendments give effect to the suggestions made above.

The Department recommends enactment of a bill to continue the program provided for under the Sugar Act of 1937 without controversial changes or features which are contrary to the policy of the Administration.

The Bureau of the Budget advises that there is no objection to the submission of this report.

Sincerely yours,
(s) Claude R. Wickard
Secretary

# What to do About Unusual Growth of Summer Plant Cane

The following letter is timely.

LOUISIANA STATE UNIVERSITY
Agricultural Experiment Station
Baton Rouge, Louisiana

December 10, 1941

Mr. Marcel J. Voorhies, General Manager
American Sugar Cane League
New Orleans, Louisiana

Dear Mr. Voorhies:

At the present time there is an unusually large acreage of summer plant cane on the plantations, and it has been reported that this cane is heavily infected with cane borers. A good number of inquiries have come in as to what should be done to prevent this crop of cane borers from going through the winter and becoming a serious menace to the 1942 crop.

Where the summer plant cane has been cultivated late, cane borers are now in from one to two joints which are underground. There is nothing that we can do to insure that they will not survive. We can, by harvesting and destroying that portion of the cane which is above ground, kill many borers and cut down the over winter supply that would come through if this is not done. Due to the fact that weather has been comparatively mild up to now, the soil has not been chilled sufficiently to stop eyes from sprouting. If we should cut the summer plant cane now, the young eyes on the root stock would at least begin to swell and thereby get into a condition which would be inducive to heavy loss should we encounter a wet cold winter and spring. I do not believe that the summer plant cane should be cut until it is known that the soil is cool enough to retard germination of young eyes. After the soil has been chilled, the cane should be cut, and by all means destroyed or submerged in water. The cane borer can go through in cane cut and left lying in the fields just as readily as it can if the cane is allowed to stand.

Some of the summer plant cane has made unusual growth, and the juice of such cane is high enough in solids to make from 18 to 20 gallons of molasses per ton of cane. On account of the high price of molasses, some thought has been given to the possibility of manufacturing molasses from such cane. If such cane can be left in the field until winter weather has set in, it would seem that passing it through the mill for the purpose of making molasses would be an ideal way to insure the destruction of the borers.

Yours very truly,
Signed: W. G. Taggart
Director.
By C. O. Eddy.

# Japanese Attack Moves Wickard to Review Goals Substitutes Radio talk For Chicago FB Speech

(*Official Release of the A.A.A.*)

Moving swiftly to adjust the Food-For-Freedom program to war developments, Secretary Wickard called on Department of Agriculture Bureau and agency heads on December 8th to reconsider 1942 production goals with a view to increasing them where necessary.

Unable to leave Washington because of the war crisis, and compelled to cancel a scheduled address before the annual convention of the American Farm Bureau Federation in Chicago, Secretary Wickard addressed the nation's farmers over the National Farm and Home Hour at 12:30 p.m., E.S.T., Tuesday, December 14th.

"The treacherous action by Japan," Secretary Wickard said, "has served to completely unite the American people in their thinking and in their action. We are facing the gravest hour of our history fully aware of the strength of our enemies and fully confident of our own ability to destroy them. We enter this struggle equipped with greater reserves of food, feed, and fiber than at any other period of our history. The United States and our allies can count on agriculture's supreme effort in the face of difficulties, to keep on turning out what our defense requires, at the time it is required, in the quantity required."

The Food-For-Freedom program, in which farmers are now indicating the extent of their voluntary participation in a nation-wide signup campaign, was originally based on the needs of the United States, the needs of Great Britain, and the food needed to build a stockpile of foodstuffs in this country for use when the war is over.

Any changes that may be necessary as a result of developments in the Pacific will be decided by the Department experts in consultation with farmer representatives throughout the nation.

# Sugar Statistics for First 10 Months of 1941

(*Official Release of the A.A.A.*)

The Department of Agriculture issued its monthly statistical statement on December 5th covering the first ten months of 1941, consolidating reports obtained from cane sugar refiners, beet sugar processors, importers and others. The statement was prepared by the Sugar Division of the Agricultural Adjustment Administration.

Total deliveries of sugar during the period January-October 1941 amounted to 6,802,693 short tons, raw value, compared with 5,742,273 tons during the corresponding period last year. Distribution of sugar in continental United States during the first ten months of 1941 in short tons, raw value, was as follows:

| | |
|---|---|
| Raw sugar by refiners (Table 1) | 7,988 |
| Refined sugar by refiners (Table 2, less exports) | 4,609,134 |
| Beet sugar processors (Table 2) | 1,638,635 |
| Importers direct-consumption sugar (Table 3) | 503,166 |
| Mainland cane mills for direct consumption (Table 4) | 43,770 |
| Total | 6,802,693 |

The distribution of sugar for local consumption in the Territory of Hawaii for the first ten months of 1941, was 30,534 tons and in Puerto Rico 67,265 tons (table 5).

Stocks of sugar on hand, October 31, in short tons, raw value, were as follows:

| | 1941 | 1940 |
|---|---|---|
| Refiners' raws | 412,795 | 320,420 |
| Refiners' refined | 297,707 | 359,975 |
| Beet sugar processors | 666,483 | 780,844 |
| Importers' direct-consumption sugar | 103,380 | 77,106 |
| Mainland cane factories | 16,907 | 16,157 |
| Total | 1,497,272 | 1,554,502 |

*Not including quota raws for processing held by importers other than refiners, which amounted to 19,835 short tons, commercial value, in 1941 and 38,168 short tons, commercial value, in 1940.

The statement of charges against the 1941 quotas during January-October was made public on November 6.

**SUGAR STATISTICAL REPORTS**

**Vol. 8, No. 10—January-October 1941.**

**TABLE 1**

**Raw sugar: Refiners' stocks, receipts, meltings and deliveries for direct-consumption for January-October, 1941**
**(short tons, raw value)**

| Source of Supply | Stocks on Jan. 1, 1941 | Receipts | Meltings | Deliveries for direct consumption | Lost by fire etc. | Stocks on Oct. 31, 1941 |
|---|---|---|---|---|---|---|
| Cuba | 87,288 | 2,045,279 | 1,958,847 | 2,663 | 92 | 170,965[1] |
| Hawaii | 34,798 | 820,290 | 780,384 | 2,063 | 0 | 72,641 |
| Puerto Rico | 88,889 | 780,185 | 844,044 | 1,100 | 69 | 23,861 |
| Philippines | 65,727 | 775,935 | 737,726 | 13 | 123 | 103,800 |
| Continental U.S. | 48,223 | 124,749 | 162,418 | 2,149 | 20 | 8,385 |
| Virgin Islands | 0 | 4,602 | 4,602 | 0 | 0 | 0 |
| Other countries | 12,437 | 220,609 | 199,901 | 0 | 2 | 33,143[2] |
| Miscellaneous (sweepings, etc.) | 0 | 384 | 384 | 0 | 0 | 0 |
| Total | 337,362 | 4,772,033 | 4,688,306 | 7,988 | 306 | 412,795 |

Compiled in the Sugar Division, from reports submitted by sugar refineries.
[1]Includes 143,757 tons in customs' custody.
[2]Includes 9,838 tons in customs' custody.

**TABLE 2**

**Stocks, production and deliveries of cane and beet sugar by United States refiners and processors, January-October, 1941.**
**(short tons, raw value)**

| | Refineries[1] | Domestic beet factories |
|---|---|---|
| Initial stocks of refined, Jan. 1, 1941 | 271,268 | 1,601,654 |
| Production | 4,683,034 | 703,464 |
| Deliveries | 4,656,595[2] | 1,638,635[3] |
| Final stocks of refined, Oct. 31, 1941 | 297,707 | 666,483 |

Compiled by the Sugar Division, from reports submitted by the sugar refineries and beet sugar factories.
[1]The refineries figures are converted to raw value by using the factor 1.063030 which is the ratio of meltings of raw sugar to refined sugar produced during the years 1939 and 1940.
[2]Deliveries include sugar delivered against sales for export. The Department of Commerce reports that exports of refined sugar amounted to 47,461 short tons, raw value, during January-September 1941. Data for exports during October are not yet available.
[3]Larger than actual deliveries by a small amount representing losses in reprocessing, etc.

**TABLE 3**

**Stocks, receipts and deliveries of direct-consumption sugar from specified areas, January-October, 1941.**
**(short tons, raw value)**

| Source of supply | Stocks on Jan. 1, 1941 | Receipts | Deliveries or usage | Stocks on Oct. 31, 1941 |
|---|---|---|---|---|
| Cuba | 25,702 | 375,287 | 325,805 | 75,184[1] |
| Hawaii | 0 | 4,013 | 4,013 | 0 |
| Puerto Rico | 241 | 130,642 | 118,129 | 12,754[2] |
| Philippines | 12,932 | 53,041 | 51,238 | 14,735 |
| Other foreign areas | 303 | 4,385 | 3,981 | 707 |
| Total | 39,178 | 567,368 | 503,166 | 103,380 |

Compiled in the Sugar Division from reports and information submitted by importers and distributors of direct-consumption sugar.
[1]Includes 4,192 tons in custom's custody.
[2]Includes 5,350 tons in custom's custody.

**TABLE 4**

**Mainland cane mills' stocks, production and deliveries, January-October, 1941**
**(short tons, raw value)**

| Stocks on Jan. 1, 1941 | Production | Deliveries: For direct consumption | Deliveries: For further processing | Stocks on Oct. 31, 1941 |
|---|---|---|---|---|
| 60,214 | 111,139 | 43,770 | 110,676 | 16,907 |

**TABLE 5**

**Distribution of sugar for local consumption in the Territory of Hawaii and Puerto Rico, January-October, 1941.**
**(short tons, raw value)**

| | |
|---|---|
| Territory of Hawaii | 30,534 |
| Puerto Rico | 67,265 |


**PAUL, RICE & LEVY**
INCORPORATED
Wholesale
INDUSTRIAL, MILL & MARINE SUPPLIES
Day, Ra. 6123 Night, Fr. 2019
501-505 Poydras St.
New Orleans, - - La.
BETHLEHEM WIRE ROPE
O I C VALVES
GUILD & GARRISON PUMPS
INTERNATIONAL INDUSTRIAL PAINTS
CHESTERTON PACKING
K-TING MANILA ROPE
CONSOL OILS
VULCAN SOOT BLOWERS

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

**LAMBORN & COMPANY, INC.**
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

**LE BOURGEOIS BROKERAGE CO.**
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
**HARRY L. LAWS & CO., INC.**
Brokers and Distributors
SUGAR and MOLASSES
**SUGAR FUTURES**
American Bank Building New Orleans, La.

**GAY, SULLIVAN & CO., INC.**
SUGAR
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

**STAUFFER, ESHLEMAN & CO., LTD.**
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
**CYANAMID**
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

**INDUSTRIAL LUBRICANTS**

BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
**STANDARD OIL CO. OF LA.**

FOR SUGAR CANE FINANCING
**STATE AGRICULTURAL CREDIT CORPORATION, INC.**
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

**AMERICAN MOLASSES CO.**
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LEGardeur Frank Youngman
**R. J. LEGARDEUR & COMPANY**
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

**PENICK & FORD, LTD., INCORPORATED**
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

**STANDARD SUPPLY AND HARDWARE CO., INC.**
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

**E. A. RAINOLD, INC.**
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 20 NEW ORLEANS, LA., JANUARY 1, 1942 No. 7

# The Sugar Industry Looks Forward

*(By C. J. Bourg)*

The domestic sugar industry is beginning the New Year thoroughly prepared and organized to do its full part in the National Defense Program. Congress has provided an extension of the Sugar Act for three years. By that extension many things are now provided for. The immediate effect will be to encourage farmers to grow sugarcane and sugar beet in the United States.

The incentive payment of 80c per 100 lbs. of sugar, raw value, will serve as a guarantee that the Federal Government is seriously interested in the expansion of production within the United States. The payment will amount to $1.33 per ton of sugarcane which will be added to the payment of approximately $3.60 per ton from the factory, if the ceiling price of raw sugar is maintained at the present level of 3½c per lb. This ceiling will be raised, in our opinion, if the Cuban crop is bought by the United States Government at a higher rate, and if the Price Control Bill provides finally that 110% of parity shall be the floor below which the price of agricultural commodities may not be fixed.

The adoption of the Fulmer-O'Mahoney-Adams-Ellender Bill provides a long-range foundation upon which the stabilization of the domestic sugar industry can be maintained. All of us are prone to think of things from the standpoint of immediate results. Of all agricultural industries, sugarcane production requires the greatest long-range planning, for the simple reason that the planting of a crop means that the land is to be devoted to the production of sugar for two, three or four years. Just at this time, we are likewise forced to anticipate that there will be a national emergency for several years. Confining ourselves to think in terms of sugar, we know that the fighting in the Pacific has brought about a complete removal of the Philippines as a source of sugar supply. Grave doubts are expressed as to the amount of sugar which can be transported from Hawaii. With the consumption of sugar increasing in the United States and with potential supplies amounting to 2,000,000 tons having been placed in jeopardy by the war in the Pacific, instead of having quota restrictions, we are faced with the necessity of increasing production to meet consumer demands. This condition will continue throughout the period of actual warfare and will be extended into the post-war period which will require readjustments in supply and demand both in the United States and in the world.

As we look forward, it becomes perfectly evident that a sudden restoration of peace will create problems of stabilization of the greatest magnitude. We cannot now foresee accurately what will have happened to the production of sugar in the meantime in areas like the Philippines, Java, India and other great sugar-producing regions of the world. Our information is that the Russian sugar industry has been practically destroyed in the Ukraine, involving more than 200 beet sugar factories and the seed plots upon which Russia has depended. No matter how far we permit ourselves to look into the future, we are forced to reach the conclusion that there will be an end to the war, to be followed eventually by reconstruction and rehabilitation. When that comes—and we all fervently pray that it will come very soon—there will be the greatest need for stabilization. The experience of the past seven years has convinced all of us that we can best stabilize the domestic sugar industry under a quota system. The Sugar Act will furnish us with an established means of adjusting the industry to any sudden change from war to a peace status. By extending the Act for three years, Congress has given the industry security against demoralization and chaos.

THE
SUGAR BULLETIN
414 Whitney Bldg., New Orleans
Marcel J. Voorhies, Editor
Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
Subscription Price. 50 Cents per Year.

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE
President, W. C. Kemper, Franklin, La.
1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

EXECUTIVE COMMITTEE
W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

It is well understood that throughout the three year period of extension, there will probably be no limitation of acreage or allotments for the marketing of sugar. The Secretary of Agriculture has recognized that there exists a need for amendment to the Sugar Act providing for corrections in the mechanics of administering the program. His suggestions of non-controversial changes will be considered by the different areas and branches of the industry and should there be agreement on amendments, Congress will most certainly give favorable consideration to the joint recommendations of the Department of Agriculture and the domestic sugar industry.

Marked significance is given to the forceful statement made in the Senate by the Chairman of the Finance Committee, Senator George of Georgia. He gave expression to his comprehensive grasp of sugar policies and the interest of each group within the domestic sugar industry. Two of the statements he made are well worth recording and emphasizing for the information and encouragement of our members:

"We might as well face the situation fairly and squarely. What is the better policy in the long run—to stabilize our markets under a quota system which has been carefully worked out, which necessarily must take into consideration the other producing areas which have usually been furnishing certain sugar for our markets—or go before the American people and ask for a tariff on sugar which will support the American producer, including the refiner, at the expense of the American people directly, with that sharp controversy over the sugar tariff coming up again and again and again?"

"We must meet the situation one way or the other. If we can maintain a reasonable quota system which will deal justly with Cuba, with Puerto Rico and Hawaii, and with other sugar-producing areas which have been accustomed to furnish a part of our sugar demands, my judgment is—that it will be infinitely better for the beet-sugar producers and for the cane-sugar producers and for the beet refineries and for the cane refineries, and for the workers in the refineries all along our Gulf and Atlantic coasts, as well as for the consumers. I say it will be infinitely better for them all if we handle the matter on a quota basis. We may admit that certain injustices exist under that system, but we must try to iron out the injustices as we gain more experience under the quota system."

## Allocations and Price Control

The Office of Production Management has taken steps to prevent hoarding of sugar. Stripped to its simplest terms, O.P.M. Order M-55 requires that wholesalers, jobbers and industrial users shall reduce their inventories and receipts to a thirty-day supply. There are some complications resulting from the inauguration of this program, but already O.P.M. has amended its original order by permitting a 15% buffer, so that individual wholesalers and retailers may avoid running out of sugar in December. Beginning with January the program will go definitely into effect on a thirty-days' supply basis. The responsibility is being placed upon the receiver of sugar, and the primary distributor (who is the sugar producer or refiner) is only required to obtain written statements from receivers certifying that their receipts do not exceed the O.P.M. limitation.

The Office of Price Administration having placed a ceiling on raw sugar last August, has now followed up the O.P.M. Order M-55 with an O.P.A. Order M-60 establishing ceilings on direct-consumption sugars. O.P.A. has described its order as a companion measure to O.P.M. Order M-55. The net result is that the O.P.M. Order will protect consumers from hoarding and local shortages, while the O.P.A. Order will protect consumers against higher prices.

The price stability is established at the wholesale level and the O.P.A. has expressed confidence that retail outlets can be depended upon to sell sugar at prices no higher than they charged before the outbreak of war.

So far the retail price of sugar and the amount of sugar which can be obtained at retail stores, have not been subjected to limitations. The policy evidently is to control the prices charged by producers and distributors, without resorting to the rationing of sugar to each consumer or attempting to control the price charged by every merchant who sells sugar. Evidently the system of distribution allocations and control of wholesale prices has been applied in the hope that rationing can be avoided.

With respect to the O.P.A. Order, the maximum prices apply at two levels: (1) Sales by primary distributors, and (2) Sales at wholesale. They include commissions, discounts and all other charges. In the case of sales by primary distributors, specific selling prices are established. Wholesalers are prohibited from selling sugar above the highest price which they charged during the period from December 1 through December 6, 1941. The effect is to prevent

prices from exceeding levels which prevailed just before the outbreak of war on December 7.

The specific maximum prices for sales by primary distributors have been announced by O.P.A. to be as follows:

"(1) For fine granulated sugar processed by United States cane sugar refineries—5.25 cents per pound f.o.b. refinery.

"(2) For beet sugar manufactured in the continental United States—5.15 cents per pound f.o.b. seaboard cane sugar refinery.

"(3) For offshore refined sugar—5.20 cents per pound f.o.b. United States cane sugar refinery nearest (freightwise) to port fo entry.

"(4) For partially or completely processed mainland cane sugar (such as 'plantation white' or 'turbinado') going into direct consumption—5.15 cents a pound f.o.b. seaboard cane sugar refinery nearest (freightwise) to point of ultimate sale.

"(5) Raw cane sugar, domestic or imported, for direct consumption—4.35 cents per pound United States mainland shipping point, including all taxes and duty.

"These maximum prices recognize the most advantageous differentials existing among the various types of sugar. Beet sugar historically sells at 10 or 20 cents per hundred pounds below the comparable price for refined cane sugar. In the case of offshore refined sugar the differential has been 5 or 10 cents per hundred pounds below domestic refined cane sugar prices.

"Partially or completely processed mainland cane sugar largely comes from Louisiana. It is sold locally by refineries for home consumption and also is used extensively by certain manufacturers, such as candy makers and bakers. These forms of sugar usually sell from 10 to 30 cents a hundred pounds below the price of refined cane sugar.

"The 'direct consumption' raw sugar maximum price allows the seller 35 cents per hundred pounds for handling.

"All of the foregoing are 'basis' prices applying to sales in 100-pound lots. They must be adjusted for grade and package differentials, using trade differentials in effect on December 1, 1941. Any charges added to the f.o.b. price to arrive at the delivered price may not exceed the corresponding charges in effect on December 1, 1941."

## Refrigeration Tests to Continue

For several years the American Sugar Cane League has financed the continuation of tests by which the effect of cold and light on new sugarcane varieties has been determined. These tests have been conducted at Arlington Farms which are in Virginia across the Potomac River from Washington. The land has been transferred to the War Department and all activities of the Department of Agriculture have in turn been transferred to other experimental stations, mostly to Beltsville. Maryland. Dr. E. W. Brandes of the Bureau of Plant Industry, has continued the tests up to the point of actual demolition of the building in which the refrigeration plant was located. There had been some uncertainty about the avaliability of facilities to continue this research work which is of direct personal interest to every grower of sugarcane. The League is therefore delighted to be able to announce that arrangements are being made for the temporary continuation of the tests until permanent facilities become available. This reassuring and welcome information is contained in the following letter:

"UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Plant Industry
WASHINGTON
December 4, 1941

Hon. Allen J. Ellender
United States Senate.
Dear Senator Ellender:

"Your letter of November 28, indicating your interest in certain of the sugar cane experiments which have been under way at Arlington Farm for the past two years, has been received.

"It has been our hope from the beginning to be able to continue these experiments after our transfer to Beltsville. Although, as you can realize, there will be a little time lost during the transfer and reestablishment from Arlington Farm, I am glad to say that we will be able to make available temporary facilities for this work while arrangements are being made for permanent facilities.

"We appreciate your interest in these studies and hope that you will have an opportunity to visit us sometime at Beltsville after our reestablishment there.

Sincerely yours,
(Signed) E. C. AUCHTER
Chief of Bureau."

## How Farmers Can Do Their "Bit"

Every American today is asking, "How can I help?" The desire of every patriotic citizen is to do something which will assist in winning the war. Sugarcane growers can contribute most by producing to the limit, as Dean Lee so constructively advised in the last issue of the Sugar Bulletin.

We have a suggestion to add:

The Office of Agricultural Defense Relations has asked us to emphasize in the greatest degree possible that farmers should examine their farm implements immediately, so that their needs may be determined well in advance. The Office urges farmers, to repair their present implements wherever possible and to replace parts which may have been so used as to create the fear of a breakdown. It is the patriotic duty of farmers to keep their farm implements in the highest state of repair. The obvious reason is that the raw material needed for new machinery is more greatly needed for defense munitions; but, just as important is the fact that by keeping machinery in the best repair, the farmer will be better able to produce at the highest efficiency and with the greatest results.

These recommendations and appeals do not mean that farmers should be discouraged from buying new machinery where it is absolutely needed. Above all things, it certainly is the wise course for each farmer to determine his needs immediately and to proceed to order whatever new machinery is essential to his successful operation next year, and to secure replacement and repair parts well in advance, so that he may not be caught in the last-minute jamb which is bound to occur next Spring when those who put off until the eleventh hour will find themselves confronted with priorities and limitations.

The Office of Agricultural Defense Relations pointed out that their function is to assist agriculture in overcoming problems brought about by national defense. They state that in all cases where essential food is being produced their office will assist in obtaining relief wherever possible; however, the most practical method to follow is to make sure that no relief will be needed. If we antcipate our requirements early enough, it will not become necessary to

appeal to our friends in the Department of Agriculture for assistance.

### Louisiana Sugar Industry Pledges Cooperation

When the National Defense Council was first organized, the American Sugar Cane League offered its active cooperation in any manner which would be helpful to the development of the greatest production for defense. Now that actual war has been declared, President Wallace C. Kemper of the American Sugar Cane League has addressed the following letter to the Secretary of Agriculture, which was presented to him by Senator Allen J. Ellender of Louisiana:

"December 18, 1941

Hon. Claude R. Wickard,
Secretary of Agriculture,
U. S. Department of Agriculture,
Washington, D. C.

Dear Mr. Secretary:

"The recent declarations of war have created a situation in the United States which calls for complete unity and coordination of effort. The Louisiana sugar industry, speaking through the American Sugar Cane League, recognizes your leadership in agricultural matters and tenders its unanimous effort and continued cooperation in the national defense program.

"We are impressed with the force and reality of the statement that production will determine the result of the war. We subscribe to your statement that food will win the war, and we recognize with you that the production of essential foods is just as important to our country as the production of the munitions of war. We are glad to reiterate our desire to increase the domestic production of the essential, non-surplus food, sugar.

"We have already offered the National Defense Council the use of our factory-capacity, when otherwise idle. Our factories are in operation continuously during the harvest season; but, beginning with the month of January, this production capacity will not be used, with any regularity, until October, unless it should be found that it is needed and suited for active participation in the production efforts of the Nation.

"We invite you to designate one of the officials of your Department, or of the Louisiana State University, to conduct a survey of the possible ways and means by which our industry can be of further assistance. The possibilities could conceivably extend beyond agriculture, when the total boiler-house capacity of the industry is fully considered. In the meantime, we await your instructions and recommendations, with the sincere hope that there may be some additional channel of collaboration which we may follow under your leadership.

Respectfully yours,
Wallace C. Kemper
President."

# Entries of Sugar Against Quotas During First Eleven Months of 1941

(*Official Release of the A.A.A.*)

The U. S. Department of Agriculture issued its eleventh monthly report on the status of the 1941 sugar quotas for the various offshore sugar-producing areas supplying the United States market on December 6th.

The report, prepared by the Sugar Division of the Agricultural Adjustment Administration, shows that the quantity of sugar charged against the quotas for all offshore areas, including the full-duty countries, amounted to 5,320,738 short tons raw value, during the first eleven months of the year, as compared with 4,222,311 tons in the corresponding periods of 1940.

The report includes sugar from all areas recorded as entered or certified for entry before December 1, 1941. The figures are subject to change after final outturn weight and polarization data for all entries are available.

There were 165,110 short tons of sugar, raw value, charged against the quota for the mainland cane area, and 1,638,635 short tons, raw value, against the quota for the continental sugar beet area, during the period January-October this year. Data for these two areas are not yet available for November.

The quantities charged against the quotas for the offshore areas during the first eleven months of the year and the balances remaining are as follows:

| Area | 1941 Sugar Quota | Quantity charged against quota | Balance remaining |
|---|---|---|---|
| | (short tons, 96° equivalent) | | |
| Cuba | 2,887,429 | 2,450,051 | 437,378[1] |
| Philippines | 1,387,383 | | |
| Less amount reallotted | 404,720 | 982,663 | 851,689 | [2] |
| Puerto Rico | 1,148,160 | | |
| Less amount reallotted | 136,968 | 1,011,192 | 985,567 | 25,625 |
| Hawaii | 1,263,700 | | |
| Less amount reallotted | 270,178 | 993,522 | 847,023 | 146,499 |
| Virgin Islands | 12,829 | 4,602 | [2] |
| Foreign countries other than Cuba | 440,304 | 181,806 | [2] |
| Total | 6,327,939 | 5,320,738 | [2] |

[1]Of which approximately 165,000 tons were in U. S. Customs' Custody.
[2]The quantity available for entry during the remainder of the year is expected to be less than the quota balance.

### Direct-Consumption Sugar

Direct-consumption sugar is included in the above amounts charged against the various quotas.

| Area | 1941 quota | Quantity charged against quota: Sugar polarizing 99.8 degrees and above | Quantity charged against quota: Sugar polarizing less than 99.8 degrees | Total charge | Balance remaining |
|---|---|---|---|---|---|
| | (short tons, 96° equivalent) | | | | |
| Cuba | 375,000 | 355,940 | 19,060 | 375,000 | 0 |
| Puerto Rico | 126,033 | 112,190 | 13,843 | 126,033 | 0 |
| Hawaii | 29,616 | 4,028 | 2,428 | 6,456 | 23,160 |
| Philippines | 80,214 | 55,489 | 551 | 56,040 | 24,174 |
| Total | 610,863 | 527,647 | 35,882 | 563,529 | 47,334 |

**QUOTAS FOR FULL-DUTY COUNTRIES**

| Areas | 1941 Quota | Quantity charged against quota[1] | Balance remaining |
|---|---|---|---|
| | (in pounds) | (in pounds) | (in pounds) |
| Canada | 7,279,181 | 592,834 | 6,686,347 |
| China and Hongkong | 3,682,673 | 276,281 | 3,406,392 |
| Dominican Republic | 180,909,920 | 130,919,262 | 49,990,658 |
| Dutch East Indies | 2,505,181 | 85,405 | 2,419,776 |
| Guatemala | 3,969,033 | 369,191 | 3,599,842 |
| Haiti | 25,002,562 | 13,595,886 | 11,406,676 |
| Mexico | 72,004,758 | 796,042 | 71,208,716 |
| Peru | 301,515,638 | 216,977,931 | 84,537,707 |
| Quotas not used to date[2] | 276,387,300 | | 276,387,300 |
| Unallotted reserve | 7,351,754 | 0 | 7,351,754 |
| Total | 880,608,000 | 363,612,832 | 516,995,168 |
| Tons | 440,304 | 181,806 | 258,498 |

[1]In accordance with Sec. 212 of the Sugar Act of 1937, the first ten short tons of sugar, raw value, imported from any foreign country other than Cuba have not been charged against the quota for that country.
[2]This total includes the following (in pounds): Argentina, 172,756; Costa Rica, 244,105; Honduras, 40,680,533; Nicaragua, 121, 132, 598; Salvador, 97,282,227; United Kingdom, 4,155,876; Venezuela, 3,436,912; other countries, 9,282,293.

One hundred thirty-seven pounds have been imported from various countries, but under the provisions of Sec. 212 of the Sugar Act, referred to in Footnote 1, these importations have not been charged against the quota.

# Losses Caused by Borer to Sugarcane in Louisiana in 1940*

(*A. L. Dugas, Louisiana Agricultural Experiment Station and J. W. Ingram, United States Department of Agriculture, Bureau of Entomology and Plant Quarantine*)

Another comprehensive study to determine the extent of injury to sugarcane in Louisiana by the sugarcane borer (*Diatraea saccharalis* (F.)) was conducted in the fall of 1940. This survey has been made annually since 1935, and the borer infestation data so obtained have been regularly of value in determining the various factors responsible for general fluctuations in borer population and the limits of practical expenditures for control. The survey for 1940 is of particular interest, however, since it reveals the pronounced effect of the extremely severe winter of 1939-40 on borer infestation and damage during the following crop season. As the season progressed it became apparent that some of the important crop pests were affected only a little, if at all, whereas others suffered materially. The numbers of overwintering larvae of the sugarcane borer, the most important insect pest of sugarcane in Louisiana, were generally reduced. Furthermore, the increase in borer population during the growing season of 1940 was abnormally slow, owing, apparently, to continued unfavorable weather.

Examinations were made on the same 10 plantations covered in previous surveys, each plantation being in, and representatives of, an area producing approximately one-tenth of the total sugarcane grown for sugar in Louisiana. On each plantation 6 fields were selected for sampling that would be proportionately representative, as to acreage, of the locally prevalent varieties of sugarcane and soil. The sample from each field consisted of 10 consecutive stalks from each of 10 locations in the field. Five of these ten-stalk lots were taken alternatively from two adjacent rows one-third of the distance across the field and the other five were taken alternately from two adjacent rows two-thirds of the distance across the field. The samples were taken approximately equidistant from each other in the rows and from the ends of the rows. The extent of borer injury was ascertained by determining the percentage of joints that showed external evidence of infestation. Studies have shown this to be a fairly accurate method of estimating the percentage of joints bored.

An effort was made to select stubble cane for examination, but when such cane was not available, plant cane was used instead. Former studies have shown that there was no significant difference between final infestations in comparable fields of stubble and of plant cane, hence the age of the cane was not considered in interpreting results.

A summary of the results for 1940 together with those for the entire period during which these surveys have been conducted is given in table 1. It may be noted that the estimated average percentage of joints bored in 1940 was 5.27 as compared with 19.74 percent in 1939. The infestation on 8 of the 10 plantations in 1940 was the lowest for any year of the 6 during which this type of survey has been conducted. The only plantation on which the infestation approached normal was in district 1, where it had been higher than in any other district each year for the 3 preceding years.

Table 1.—Sugarcane borer infestation, as measured by percentage of joints bored, on representative plantations, from 1935 to 1940 inclusive.

| District | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 |
|---|---|---|---|---|---|---|
| 1 | 9.9 | 8.00 | 26.35 | 37.03 | 31.68 | 17.68 |
| 2 | 9.8 | 7.40 | 13.12 | 15.21 | 22.46 | 4.63 |
| 3 | 9.4 | 9.94 | 16.12 | 15.16 | 21.05 | 5.22 |
| 4 | 2.7 | 9.38 | 8.62 | 9.09 | 9.24 | .81 |
| 5 | 6.1 | 7.89 | 7.77 | 8.75 | 8.42 | 4.03 |
| 6 | 10.4 | 4.97 | 15.03 | 15.74 | 18.29 | 8.84 |
| 7 | 3.1 | 1.87 | 5.67 | 5.18 | 10.30 | 1.63 |
| 8 | 4.4 | 3.58 | 14.53 | 14.65 | 23.00 | 1.31 |
| 9 | 13.3 | 8.53 | 19.81 | 17.13 | 27.38 | 2.44 |
| 10 | 11.5 | 25.43 | 33.50 | 21.57 | 25.02 | 6.15 |
| Average | 8.1 | 8.70 | 16.05 | 15.85 | 19.74 | 5.27 |

The value of the 1940 sugarcane crop milled for sugar in Louisiana was approximately 11 million dollars. With an average of 5.27 percent of the joints bored, it is estimated, on the basis of studies previously conducted to determine sucrose and weight losses in bored cane, that the borer loss in 1940 mounted to about $750,000.

The first apparent effect of the extreme cold on the borer was the high mortality of the larvae in hibernation. Examination after the freezes to determine the status of overwintering borers in cane, cane trash, and corn indicated that the survival was only about 15 percent of normal. Since the early spring infestation results from the emergence of overwintered borers, the amount of early damage is, of course, largely dependent on the numbers of larvae successfully surviving the winter.

Extensive search for first-generation borer eggs in April and May yielded very few egg masses. In fact, the first-generation borers were so very scarce that insecticidal control experiments had to be postponed until second-generation borers appeared. Then, contrary to what usually occurs, the increase in second-generation borers was very slight.

A comparison of first-generation infestation, in what was considered the most heavily infested fields in 1939 and 1940, revealed that the infestation in 1940 was only about one-twentieth of that prevalent in 1939. Second-generation infestation was only about one-ninth of that prevalent in 1939.

It seems apparent from the data obtained that the sugarcane borer population was greatly reduced by the severe winter of 1939-40 and failed to recover during the growing season of 1940. As a result, borer injury for that year for the whole State was the lightest yet observed during the current century.

*Cooperative work. The position of the authors' names does not indicate seniority.

**FOR SALE**

**GOLDEN RIDGE FACTORY INTACT**

**500 ton capacity, 6 foot mill; Corliss Engine; Mirlees-Watson Knives; Steel Carrier; Double Effects; 2 Vacuum Pans; Water Purification and Vacuum Pan Cooling Systems, Etc.**

**Contact Mr. H. M. Sevin,**
Secretary-Treasurer,

**WEBRE-STEIB CO., LTD.**
**Vacherie, La.**

# Supply Position of Eastern Cane Sugar Refiners Reported

*(Official Release of the A.A.A.)*

A second report on the supply and shipping position of eastern cane sugar refiners for the remainder of 1941 was made public on December 5th by the Department of Agriculture.

The attached table, prepared by the Sugar Division of the Agricultural Adjustment Administration, shows that the quantity of offshore sugar the refiners south of Cape Hatteras had on hand on November 1, their receipts of sugar between that time and November 22, and their sugars afloat or for which vessels had been chartered as of November 22, amounted to 154,957 short tons, raw value. This supply, together with the estimated 275,000 tons of mainland cane sugar from the 1941 crop which will be available for melting by these refiners during the balance of the year, totals 429,957 tons, as compared with their meltings of 219,792 tons during the last two months of 1940.

The comparable 1941 figures on stocks, afloats, and charterings of offshore sugar of the refiners north of Cape Hatteras totaled 533,313 tons. The meltings of these refiners in the November-December 1940 period amounted to 468,711 tons. Therefore, the raw sugar supplies of all eastern refiners for the 1941 period under discussion amounted to 963,270 tons as compared with total meltings of 688,503 tons during the last two months of 1940. Distribution by these refiners during November and December 1940 totaled 748,430 tons.

These figures do not include the raw sugar stocks of firms refining sugar for their own use in manufactured articles or balances of quota sugars to be chartered. In addition to the raw sugar supplies, eastern refiners had about 155,000 tons of refined sugar on hand on November 1 while eastern importers of direct consumption sugar had approximately 79,000 tons of quota sugar on the same date. Moreover, continental cane mills normally market about 35,000 tons of direct-consumption sugar during the last two months of the year.

**CANE SUGAR SUPPLY AND SHIPPING SITUATION OF EASTERN REFINERIES[1]**
**(short tons, raw value)**

| | Off-shore raw sugar stocks on hand Nov. 1[2] | Receipts of offshore sugar Nov. 1 to Nov. 22 | Offshore sugar afloat Nov. 22 | Offshore sugar for which boats chartered but which had not sailed by Nov. 22 | Total | Nov.-Dec. 1940 meltings by Eastern refiners[2] |
|---|---|---|---|---|---|---|
| Refineries located north of Cape Hatteras | 169,505 | 114,932 | 73,408 | 175,468 | 533,313 | 468,711 |
| Refineries located south of Cape Hatteras | 82,238 | 39,720 | 2,777 | 30,222 | 154,957 | 131,436 |
| Estimated mainland cane sugar available for melting | | | | | 275,000 | 88,356 |
| | | | | | 429,957 | 219,792 |
| Total | 251,743 | 154,652 | 76,185 | 205,690 | 963,270 | 688,503 |

[1]This table covers operations of only those refiners who market sugar and does not include raw stocks of firms refining sugar for their own use in manufactured articles.

[2]For purposes of this table, the stocks on Nov. 1, 1941 and the Nov.-Dec. 1940 meltings of one company with refineries both north and south of Cape Hatteras have been prorated on the basis of the refining capacity of its various refineries.

**Note:** In addition to the raw sugar supplies shown above, these refiners had stocks of refined sugar on hand on November 1, amounting to approximately 155,000 tons; Eastern importers of direct-consumption sugar had stocks of quota sugar amounting to approximately 79,000 tons; and continental cane mills normally market about 35,000 tons of direct-consumption sugar during the last two months of the year. Cargoes of quota sugars to be chartered are excluded.

# The Farm Machinery Situation

*(By C. J. Bourg)*

The Office of Agricultural Defense Relations has explained that their plans in connection with priorities and allocations under OPM and SPAB call for an 80% production of farm implements, as compared to 1940.

This does not mean that the production of each new implement will be reduced to 80%, but the average will be 80%; in other words, some implements, like milking machines, will be permitted above 100%. Planters and cultivators used in sugar production will probably be between 90 and 100%.

The Office of Agricultural Defense Relations has asked us to emphasize in the greatest degree possible that farmers should examine their farm implements immediately, so that their needs may be determined well in advance. The Office urges farmers to repair their present implements wherever possible and to replace parts which may be so used as to create the fear of a breakdown. It is the patriotic duty of farmers to keep their farm implements in the highest state of repair. The obvious reason is that the raw material needed for new machinery is more greatly needed for defense measures; but, just as important is the fact that by keeping machinery in the best repair, the farmer will be better able to produce at the highest efficiency and with the greatest results.

These recommendations and appeals do not mean that farmers should be discouraged from buying new machinery where it is absolutely needed. Above all things, it certainly is the wise course for each farmer to determine his needs immediately and to proceed to order whatever new machinery is essential to his successful operation next year and to secure replacement and repair parts well in advance, so that he may not be caught in the last-minute jamb which is bound to occur next Spring when those who put off until the eleventh hour will find themselves confronted with priorities and limitations.

The Office of Agricultural Defense Relations pointed out that their function is to assist agriculture in overcoming problems brought about by national defense. They state that in all cases where essential food is being produced their office will assist in obtaining relief wherever possible; however, the most practical method to follow is to make sure that no relief will be needed. If we anticipate our requirements early enough, it will not become necessary to appeal to our friends in the Department of Agriculture for assistance.

# Manufacture of Gasoline from Molasses Demonstrated at L. S. U

Approximately 35 technical men and representatives of the petroleum and sugar industries on October 2nd saw the final steps in the manufacture of gasoline from blackstrap molasses, a by-product of the sugar industry.

A small pilot unit, made by Dr. J. W. Jean of Pasadena, Calif., inventor of the polymerization process which makes it possible to convert butyl alcohol, obtained by the fermentation of molasses, into a motor fuel of high octane rating, was used in the demonstration.

W. Ludwell Owen, son of Dr. W. L. Owen, Baton Rouge bacteriologist who has patent rights for developing the process in the sugar industry was in charge of the demonstration. He was assisted by C. C. Capdeville of Baton Rouge and New York, molasses broker and sugar operator in Cuba, and Louis Cusachs, assistant director of the conservation department laboratory where the tests were made.

### Keen Interest Expressed

Dr. Owen said that at the conclusion of the demonstration both C. N. Pressburg of the Cuba Cane Sugar corporation and J. A. Applebaum of the Central-Aguirre factory in Puerto Rico expressed the keenest interest in the tests. Mr. Pressburg indicated that his company would be vitally interested in obtaining some complete cost figures on this process.

Charles Perkins of the Puenta-Allegra Sugar Co., of Cuba told Dr. Owen that this was the first conclusive proof of the integration of the sugar and the motor fuel industry. Mr. Capdeville discussed with the visitors the great possibilities of this process for Cuba and distributed small samples of the new motor fuel made in the test runs.

Dr. Owen answered numerous questions as to the probable cost of the process on a commercial basis.

### Fifteen Cents a Gallon

The sugar gasoline costs about 15 cents a gallon to produce, Owen said, three times the cost of the natural product, so that large-scale production at present is economically impractical except in sugar countries having surplus blackstrap and high-priced imported motor fuels.

Industrial alcohol long has been produced from molasses and other farm products, used for blending with petroleum in order to stretch out motor fuel supplies, particularly in Europe. But this, Dr. Owen said, presented difficulties overcome now in the development of gasoline directly from blackstrap.

"It was difficult to prevent the separation of the ethyl alcohol from the gasoline and some special carburetor adjustments were required," Dr. Owen explained. "The new process is one in which butyl alcohol, made from blackstrap, is polymerized into a chemical equivalent of gasoline with a high octane content."

Among those present in addition to those already mentioned were: John G. Greven, Western States Centrifugal Corp., Hamilton, Ohio; W. S. Daubert, Cinclare-Central factory, Cinclare; W. G. Mundinger, Ethyl Gasoline Corporation, Baton Rouge; S. B. Sweetze, Standard Oil laboratories, Baton Rouge; W. N. Arnold, Interstate Natural Gas Co., Baton Rouge; H. J. Gerste, Cuban-American Sugar Co., Grammercy; Thomas Lowe, realty operator, Thibodaux; A. R. Wuertele, Ingleside plantation, Pointe Coupee parish; F. W. Chisholm, director of the conservation department laboratories, Baton Rouge.

*—Baton Rouge State Times, Oct. 24, 1941.*

Squier Sugar Machinery

MILLS and CRUSHERS
AIR-DRAULIC ACCUMULATORS
JUICE HEATERS
EVAPORATORS, CAST IRON AND WELDED PLATE
PANS, CAST IRON AND WELDED PLATE
CRYSTALLIZERS
HIGH SPEED CENTRIFUGALS
SUGAR DRYERS
PUMPS AND FANS
COMPLETE SUGAR FACTORIES

The Geo. L. Squier Mfg. Co.
462 Broadway Buffalo, N. Y.

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

LAMBORN & COMPANY, INC.
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

LE BOURGEOIS BROKERAGE CO.
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
HARRY L. LAWS & CO., INC.
Brokers and Distributors
SUGAR and MOLASSES
SUGAR FUTURES
American Bank Building New Orleans, La.

GAY, SULLIVAN & CO., INC.
SUGAR
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

STAUFFER, ESHLEMAN & CO., LTD.
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
CYANAMID
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

INDUSTRIAL LUBRICANTS

BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
STANDARD OIL CO. OF LA.

FOR SUGAR CANE FINANCING
STATE AGRICULTURAL CREDIT CORPORATION, INC.
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

AMERICAN MOLASSES CO.
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LEGardeur Frank Youngman
R. J. LEGARDEUR & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

PENICK & FORD, LTD., INCORPORATED
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

STANDARD SUPPLY AND
HARDWARE CO., INC.
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

E. A. RAINOLD, INC.
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 20 NEW ORLEANS, LA., JANUARY 15, 1942 No. 8

# The War Record of Sugar Is Being Written

*(By C. J. Bourg)*

There have been so many orders and press releases issued with respect to sugar since the declaration of war that it seems to be a good idea to print a number of them in *The Sugar Bulletin*, so that the information may reach all of our members and this issue of the Bulletin may serve as a ready reference in the future.

The announcement of most direct effect from the standpoint of the sugarcane grower was the establishment of a ceiling of 3.73c for Louisiana raw sugar effective January 5th. Although the announcement comes late in the season, it will have the effect of raising appreciably the seasonal average price provided in the sugarcane purchase contract, which will be the basis of factory payment to growers for the 1941 crop.

The OPA likewise fixed the price of refined sugar at 5.45c wholesale and direct-consumption sugars in proportion, as detailed in the Order. In addition, wholesalers are restricted to basing their price to conform with the prices which were being charged in October and December, so that the consumer will be protected.

On the other hand, the OPM has placed restrictions on deliveries of sugar in such a manner as to try to bring about a situation where all distributors and industrial users of sugar will be restricted to a 30-day supply. The purpose is to keep the sugar supply well distributed among consumers and throughout the country, so as to prevent hoarding and to avoid rationing.

The United States Export-Import Bank has also entered into the sugar picture by purchasing the entire sugarcane crop of Cuba on the basis of 2.65c per pound of raw sugar. In order to maintain a proportionate distribution of raw sugars to refiners, the Sugar Division has called a public hearing for January 16th to determine the allocations of raw sugar from all areas to all refiners in the United States.

Congress has made some progress towards the enactment of a Price-Control Bill. The House had provided a definite standard of 110% of parity for all agricultural commodities and the Senate has agreed to that standard, with other provisions which might mean higher prices; but, at least, the 110% of parity would seem to be agreed upon and will most likely remain in the Bill finally adopted. Both the House and Senate have also agreed that the Price Administrator shall not be permitted to establish a ceiling on a finished or processed agricultural commodity, the effect of which would be to vitiate the 110% standard for the farmers. As applied to sugar, this would mean that the Administrator could not set a ceiling on raw sugar which would bring about a price to sugarcane growers or sugar beet growers of less than the standard otherwise provided, whether 110% of parity or higher.

The State Department has negotiated a Reciprocal Trade Agreement with Cuba and further reduced the tariff from 90c to 75c per cwt. of sugar. During the emergency these changes will have no significance; but it is very evident that when the emergency is over and the Sugar Act is to be extended, there will have to be a definite readjustment of policy by Congress, so that the domestic producers will be protected to the same extent in the future as they have been under the sugar program since 1934.

All of the above matters briefly discussed are dealt with in the announcements and orders printed elsewhere in this issue of *The Sugar Bulletin.*

THE
SUGAR BULLETIN
414 Whitney Bldg., New Orleans
Marcel J. Voorhies, Editor
Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
Subscription Price, 50 Cents per Year

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE
President, W. C. Kemper, Franklin, La.
1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

EXECUTIVE COMMITTEE
W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

# General Preference Order No. M-54 to Conserve the Supply and Direct the Distribution of Molasses

*(Official Release)*

Whereas the national defense requirements have created a shortage of Molasses, as hereinafter defined, for defense, for private account, and for export, and it is necessary in the public interest and to promote the defense of the United States, to conserve the supply and direct the distribution thereof;

*Now, therefore, it is hereby ordered*, That:

§1031.1 *General Preference Order* M-54-(a) *Definitions.* For the purposes of this Order:

(1) "Molasses" means any molasses, sirup, sugar solution, or any form of fermentative sugar (derived from sugar cane or sugar beets) other than direct-consumption sugar (as defined in General Preference Order No. M-55) or sugar intended for and used for manufacture into direct-consumption sugar.

(2) "Producer" means any person engaged in the production of Molasses and includes any person who has Molasses produced for him pursuant to toll agreement.

(3) "Importer" means any person who transports Molasses in any manner into the continental United States. Release from the bonded custody of the United States Bureau of Customs shall be deemed a transportation.

(4) "Distributor" means any person who sells Molasses of which he is not either the Producer or the Importer.

(5) "Class 1 Purchaser" means any person who requires Molasses in the manufacture of, or for sale to manufacturers of, any one or more of the following products:

(i) Yeast

(ii) Citric Acid

(iii) Edible Molasses

(iv) Insecticides.

and any person who requires Molasses for, or for sale for, dust extraction purposes.

(6) "Class 2 Purchaser" means any person who requires Molasses in the manufacture of, or for sale to manufacturers of, feed (other than for the barrel trade).

(7) "Class 3 Purchaser" means any person who requires Molasses for, or for sale for, foundry purposes.

(8) "Class 4 Purchaser" means any person who requires Molasses in the manufacture of, or for sale to manufacturers of, vinegar.

(9) "30 day supply" means a quantity of Molasses not in excess of 1/12 of the quantity used by a Purchaser listed above (distributed in case of a Distributor) during the 12 month period ended June 30, 1941 (a 15 day supply shall be one-half of a 30 day supply). Purchasers shall determine a 30 day supply with respect to each use specified in subparagraphs (a) (5), (6), (7) and (8) above. Quantity shall in all cases be computed in terms of sugar content.

(b) *Applicability of Priorities Regulation No. 1.* This Order and all transactions affected thereby are subject to the provisions of Priorities Regulation No. 1, as amended from time to time, except to the extent that any provision hereof may be inconsistent therewith, in which case the provisions of this Order shall govern.

(c) *Restrictions on deliveries.* Anything in priorities Regulation No. 1 to the contrary notwithstanding:

(1) No Class 1, Class 2, Class 3 or Class 4 Purchaser shall accept deliveries of Molasses in excess of the quantity set forth below less any quantity in excess of a 15 day supply on hand on the first day of the month in which delivery is to be made:

(i) Class 1 Purchaser—during any calendar month, a 30-day supply.

(ii) Class 2 Purchaser—during month of Jan-

uary 1942, 75% of a 30-day supply; during any calendar month thereafter, 50% of a 30-day supply.

(iii) Class 3 Purchaser—during any calendar month, 110% of a 30-day supply.

(iv) Class 4 Purchaser—during month of January 1942, 85% of a 30-day supply; during any calendar month thereafter, 70% of a 30-day supply.

(2) Prior to delivery of Molasses, within the limitations of subparagraphs (c) (1) hereof, the prospective deliveree thereof shall submit to the deliverer a certificate in substantially the following form, manually signed by a duly authorized official:

The undersigned is a Class ..... Purchaser. During the 12 month period ended June 30, 1941, the undersigned used as a Class ..... Purchaser ..... gallons of Molasses (of ..... sugar content). The delivery of Molasses, in connection with which this certificate is furnished, will not be taking into consideration Molasses received and to be received during this month from all other sources, in excess of that to which the undersigned is entitled pursuant to General Preference Order No. M-54 with the terms of which Order the undersigned is familiar.

Dated .....

.....
(Name of Consumer)

By.....
(Duly Authorized Official)

(3) Purchasers specified in paragraph (a) hereof may make application to the Director of Priorities for deliveries of Molasses in addition to those set forth in paragraph (c) hereof if they own, possess or control facilities for the storage of the same.

(4) No person shall knowingly deliver Molasses to any Class 1, Class 2, Class 3 or Class 4 Purchaser in violation of the terms of subparagraphs (c) (1) and (2) hereof.

(5) After January 15, 1942, no person shall deliver, use or accept delivery of Molasses for the manufacture of beverage spirits.

(6) On and after January 1, 1942, except with respect to deliveries within the limitations of subparagraphs (c) (1) and (2) hereof, deliveries originating and completed outside of the continental United States, deliveries to an Importer originating outside of the continental United States and deliveries specifically authorized by the Director of Priorities, no deliveries of Molasses shall be made by any Producer, Distributor or Importer; and no person shall accept delivery of Molasses made in violation of the foregoing clause. At the beginning of each calendar month the Director of Priorities will issue to all Producers, Distributors and Importers specific directions covering deliveries of Molasses which may be made by such Producers, Distributors and Importers during such month. Such directions will be primarily to insure the satisfaction of all defense requirements and to provide an adequate supply for essential civilian uses, and they may be made at the discretion of the Director of Priorities without regard to any preference rating assigned to particular contracts or orders.

(d) *Restrictions on consumption.* Unless otherwise authorized by the Director of Priorities, no Purchaser specified in paragraph (a) hereof shall, during any month commencing with the month of January, 1942, use or consume more Molasses than he would be permitted to receive during such month (if he had no Molasses on hand) pursuant to the provisions of paragraph (c) hereof.

(e) *Intra-Company transactions.* The prohibitions or restrictions contained in this Order with respect to deliveries shall, in the absence of a contrary direction, apply not only to deliveries to other persons, including affiliates and subsidiaries, but also to deliveries from one branch, division or section of the same or any other enterprise owned or controlled by the same person.

(f) *Reports.* Reports shall be made at such times, on such forms and with respect to such matters as shall be prescribed by the Chemicals Branch of the Office of Production Management. Persons who have stocks of Molasses on hand which they are forbidden by the terms of this Order to deliver or use shall forthwith report such fact (and the details thereof) in writing to the Chemicals Branch of the Office of Production Management and shall hold the said stocks until further order of the Director of Priorities.

(g) *Notification of customers.* Producers, Distributors and Importers shall, as soon as practicable, notify each of their regular customers of the requirements of this Order, but the failure to give such notice shall not excuse any person from the obligation of complying with the terms of this Order.

(h) *Violations or false statements.* Any person who violates this Order or who wilfully falsifies any records which he is required to keep by the terms of this Order, or by the Director of Priorities, or otherwise wilfully furnishes false information to the Director of Priorities, or to the Offce of Production Management may be deprived of priorities assistance or may be prohibited by the Director of Priorities from obtaning further deliveries of materials subject to allocation. The Director of Priorities may also take any other action deemed appropriate, including the making of a recommendation for prosecution under section 35 (A) of the Criminal Code (18 U.S.C. 80).

(i) *Appeals.* Any person affected by this Order who considers that compliance therewith would work an exceptional and unreasonable hardship upon him, or that it would result in a degree of unemployment which would be unreasonably disproportionate compared with the amount of Molasses conserved, or that compliance with this Order would disrupt or impair a program of conversion from nondefense to defense work, may appeal to the Office of Production Management, Reference: M-54, attention Chemicals Branch, setting forth the pertinent facts and the reason he considers he is entitled to relief. The Director of Priorities may thereupon take such action as he deems appropriate.

(j) *Effective date.* This Order shall take effect immediately and shall continue in effect until revoked by the Director of Priorities. (P.D. Reg. 1, Aug. 27, 1941. 6 F.R. 4489; O.P.M. Reg. 3 Amended, Sept. 2, 1941, 6 F.R. 4865; E.O. 8629, Jan. 7, 1941, 6 F.R. 191; E.O. 8875, Aug. 28, 1941, 6 F.R. 4483; sec. 2 (a), Public No. 671, 76th Congress, Third Session, as amended by Public No. 89, 77th Congress, First Session; sec. 9, Public No. 783, 76th Congress, Third Session).

Issued this 31st day of December 1941.

By DONALD M. NELSON,
Director of Priorities.

# General Preference Order M-55, to Conserve the Supply and Direct the Distribution of Direct-Consumption Sugar

(*Official Release*)

WHEREAS, it appears that the fulfillment of requirements for the defense of the United States will result in a shortage in the supply of direct-consumption sugar for the combined needs of defense, private account and export, and it is necessary in the public interest and to promote the defense of the United States, to conserve the supply and direct the distribution of direct-consumption sugar.

NOW THEREFORE, IT IS HEREBY ORDERED THAT:

1032.1 General Preference Order.

(a) *Applicability of Priorities Regulation No. 1.* This Order and all transactions affected thereby are subject to the provisions of Priorities Regulation No. 1, as amended from time to time, except to the extent that any provision hereof may be inconsistent therewith, in which case the provisions of this order shall govern.

(b) *Definitions for the Purposes of this order.*

(c) "Person" means any individual, partnership, association, corporation, or other form of enterprise.

(2) "Direct-Consumption Sugar" means any grade or type of saccharine product derived from sugar beets or sugar-cane, which is not to be, and which shall not be, further refined or otherwise improved in quality; except sugar in liquid form which contains non-sugar solids (excluding any foreign substance that may have been added) equal to more than 6 percentum of the total soluble solids, and except also sirup of cane juice produced from sugar-cane grown in continental United States.

(3) "Primary Distributor" means any person who manufactures or imports direct-consumption sugar or the agent of any such person.

(4) "Receiver" means any person who buys or accepts delivery of direct-consumption sugar from any Primary Distributor.

(c) *Restrictions upon Receivers.*

(1) Unless specifically authorized by the Director of Priorities, no Receiver shall

(i) accept delivery in December 1941 of any direct-consumption sugar in excess of the amount delivered to him in December 1940; or, in any calendar month after December 1941, accept delivery of any direct-consumption sugar in excess of the amount delivered to him in the corresponding calendar month of 1940; or

(ii) accept delivery of any direct-consumption sugar if, upon acceptance of such delivery, the amount of direct-consumption sugar in his possession or under his control shall exceed a thirty days' supply based upon his use or resales during the thirty day period commencing two years before such acceptance of delivery; *provided*, that there shall be deducted from the maximum supply thus permitted the amount, if any, by which the total of his use or resales from December 1, 1941, to the date of acceptance of such delivery exceeds his total use or resales during the corresponding period beginning and ending two years before, except that to the extent such corresponding period includes the whole or any part of December, 1939, there shall be used instead the figures for the whole or such part of December, 1940; or

(iii) accept delivery after January 1, 1942, of any direct-consumption sugar unless before accepting the delivery he files with or mails to the Office of Production Management a report on Form PD-206, or such other forms as may be required from time to time by the Director of Priorities.

(2) Notwithstanding the limitations of paragraph (c) (1), a Receiver may accept delivery of the smallest number of carload lots which includes the amount permitted by paragraph (c) (1).

(3) In addition to deliveries permitted to be accepted by the foregoing limitations, any Receiver may accept delivery of sufficient direct-consumption sugar to enable him to fill any actual order by, or contract with

(i) the War or Navy Departments

(ii) the government of any of the following countries; the United Kingdom, Canada, and other dominions; Crown colonies and protectorates of the British Empire, Belgium, China, Greece, the Kingdom of the Netherlands, Norway, Poland, Russia and Yugoslavia:

(iii) any agency of the United States Government for materials, supplies or equipment to be delivered to or for the account of any country listed above, or any other country including those in the Western Hemisphere, pursuant to the Act of March 11, 1941, netitled "An Act to Promote the Defense of the United States". (Lend-Lease Act)

(4) Except as specifically authorized by the Office of Production Management or for the purpose of filling the actual orders or contracts referred to in paragraph

(1) To Defense Supplies Corporation

(2) To the War and Navy Departments

(3) to the government of any of the following countries: the United Kingdom, Canada, and other dominions; Crown colonies and protectorates of the British Empire, Belgium, China, Greece, the Kingdom of the Netherlands, Norway, Poland, Russia, and Yugoslavia.

(4) to any Agency of the United States Government for materials, supplies, or equipment to be delivered to, or for the account of, the government of any country listed above or any other country, including those in the Western Hemisphere, pursuant to the Act of March 11, 1941, entitled "An Act to Promote the Defense of the United States" (Lend-Lease Act).

(f) *Appeal.* Any person affected by this Order who considers that compliance therewith would work an exceptional and unreasonable hardship upon him may apply for relief to the Office of Production Management by telegram or letter setting forth the pertinent facts and the reason such person considers that he is entitled to relief.

(g) *Violations.* Any Person who wilfully violates any provision of this Order or who by any act or omission falsifies records to be kept or information to be furnished pursuant to this Order may be prohibited from receiving further deliveries of any Ma-

terial subject to allocation, and such further action may be taken as is deemed appropriate, including a recommendation for prosecution under Section 35 (A) of the Criminal Code (18 U.S.C. 80).

(h) *Communications to Office of Production Management.* Reports to be filed, appeals, and other communications concerning this Order, should be addressed to the

"Office of Production Management
Washington, D. C. Ref: M-55"

(i) *Effective Date, and Termination.* This Order shall take effect immediately; and shall continue in effect through December 31, 1942 unless revoked, amended, or modified prior thereto.

(P.D. Reg. 1, Aug. 27, 1941, 6 F.R. 4489; O.P.M. Reg. 3 Amended, Sept. 2, 1941, 6 F.R. 4865; E.O. 8629, Jan. 7, 1941, 6 F.R. 191; E.O. 8875, Aug. 28, 1941, 6 F.R. 4483; sec, 2(a), Public No. 671, 76th Congress, Third Session, as amended by Public No. 89, 77th Congress, First Session; sec. 9, Public No. 783, 76th Congress, Third Session).

Issued this 13th day of December, 1941.

by Donald M. Nelson
Director of Priorities.

# Chapter XI—Office of Price Administration

Part 1334—Sugar

Amendment No. 1 to Price Schedule No. 60—Direct-Consumption Sugars

Sections 1334.51, 1334.52, and 1334.55 are hereby amended to read as follows:

1334.51 *Maximum Prices for sales of direct-consumption sugars by primary distributors.* On and after January 9, 1942, regardless of the terms of any contract of sale or purchase or other commitment, no primary distributor shall sell, offer to sell, deliver or transfer direct-consumption sugars at prices higher than the maximum prices established by this section 1334.51. These maximum prices are gross prices and shall include prevailing commissions, discounts, and all other charges.

(a)(1) The maximum basis price for fine granulated sugar processed by continental United States cane sugar refineries shall be $5.45 per one hundred pounds f.o.b. factory.

(2) The maximum basis price for fine granulated beet sugar manufactured in the continental United States shall be $5.35 per one hundred pounds f.o.b. United States seaboard cane sugar refinery nearest freightwise to point of delivery.

(3)(i) The maximum basis price for fine granulated sugar delivered to the continental United States from offshore areas shall be $5.40 per one hundred pounds duty-paid basis, f.o.b. United States seaboard cane sugar refinery nearest freightwise to point of delivery.

(ii) The maximum price for turbinado, washed-white, or similar sugar for direct consumption delivered to the continental United States from offshore areas shall be $5.20 per one hundred pounds duty-paid basis f.o.b. United States seaboard cane sugar refinery nearest freightwise to point of delivery.

(4) The maximum basis price for direct-consumption sugars other than those sugars provided for in subparagraphs (a)(1), (a)(2), (a)(3), and (b)(1) hereof, processed from United States mainland sugar cane, including but not limited to turbinado, plantation white and high-washed sugars, shall be $5.35 per one hundred pounds f.o.b. United States seaboard cane sugar refinery nearest freightwise to point of delivery.

(5) The respective maximum basis prices established in subparagraphs (a)(1), (a)(2), (a)(3)(i), and (a)(4), above, shall each be adjusted for grade and package differentials in accordance with the seller's differentials therefor published or in effect on December 1, 1941.

(6) The maximum delivered price for each of the sugars provided for in subparagraphs (a)(1), (a)(2), (a)(3), and (a)(4), above, respectively, shall be determined by adding to the respective maximum basis f.o.b. prices, as adjusted for grades and packages, the transportation charges per one hundred pounds on a shipment of identical quantity from the refinery from which the lowest established transportation rate applies to the point of delivery. Such transportation rate shall be based on the mode of transportation and routing employed by the basing point refinery on December 1, 1941, in calculating the "freight applications" or "selling prepay" to the point of delivery; Provided, for deliveries in a refinery city metropolitan area, the maximum delivered price shall be determined by adding to the respective maximum basis f.o.b. prices, as adjusted for grades and packages, the delivery charge per one hundred pounds on an identical shipment based on the cartage rates employed by the seller on December 1, 1941.

(b)(1) The maximum price for direct-consumption raw cane sugars of 96 degrees polarization, of domestic or foreign origin, shall be $4.60 per one hundred pounds United States mainland shipping point, including all taxes and duty.

(2) The maximum prices specified in subparagraph (b)(1), above, shall be adjusted by making allowances per pound for each degree of polarization above or below 96 degrees (fractions of a degree in proportion) in accordance with the method customarily used prior to the effective date of this schedule.

1334.52 *Maximum prices for sales of direct-consumption sugars at wholesale by persons other than primary distributors.* On and after January 9, 1942, regardless of the terms of any contract of sale or purchase, or other commitment, no person shall sell, offer to sell, deliver or transfer direct-consumption sugars at wholesale, and no person shall buy, offer to buy, or accept delivery of direct-consumption sugars at wholesale at prices higher than the maximum price established by this section 1334.52. These maximum prices are gross prices and include prevailing commissions, discounts, and all other charges.

(a) The basic maximum price shall be the highest price at which the seller sold such sugars of similar grade, package, and amount to a similar purchaser during either the period October 6, 1941 to October 11, 1941, inclusive, or the period December 1, 1941, to December 6, 1941, inclusive. The seller may select either period at his option. However, once having selected a period, the seller must use the period selected for all purposes of this Section. The maximum price for sugars acquired subsequently at a higher net purchase cost shall be determined by adding to the basic maximum price the amount, if any, by which the said higher net purchase cost exceeds the net purchase cost of the sugars upon which the basic maximum price was based, provided the seller has first sold his entire inventory of lower cost

sugars, and provided further, in calculating said maximum prices, the amount by which any net purchase cost exceeds the maximum prices established by section 1334.51 shall not be included.

(b) These maximum prices shall include at least the same absorption of transportation costs, and other charges, and at least the same rendition of services, as were or would have been absorbed or rendered by the seller on comparable shipments to the same place of destination during the period selected by the seller as provided for in paragraph (a) of this Section.

(c) In cases where a person makes sales of such sugars through more than one selling unit, other than salesmen making sales at uniform prices, each such unit shall be deemed to be a separate entity for the purpose of determining the maximum prices established by this Section.

1334.55 *Evasion.* The price limitations established by this Schedule shall not be evaded whether by direct or indirect methods in connection with a purchase, sale, delivery, or transfer of direct-consumption sugars alone or in conjunction with any other commodity or material or by way of any commission, service, transportation, or other charge or by a tying-agreement or other trade understanding or by making the discounts given or other terms and conditions of sale more onerous to the purchaser than those available or in effect on December 1, 1941 for purchasers from primary distributors or during the period selected by the seller as provided for in paragraph (a) of Section 1334.52, or by any other means.

Section 1334.59 is hereby amended by striking out therefrom paragraph (g). (Executive Orders Nos. 8734, 8875, 6 Fed. Reg. 1917, 4483).

This amendment No. 1 shall become effective January 9, 1942.

Issued this 9th day of January, 1942.

LEON HENDERSON,
Administrator.

## Amendment No. 2 to Price Schedule No. 16—Raw Cane Sugars

(*Official Release*)

Section 1334.9 Appendix A—Maximum prices for raw cane sugars—is hereby amended to read as follows:

1334.9 Appendix A—Maximum prices for raw cane sugars.

(a) Maximum prices per pound for raw cane sugars from offshore producing areas of 96 degrees polarization duty paid cost and freight basis shall be as follows:

(1) United States Atlantic ports north of Cape Hatteras to and including New York, 3.74 cents.

(2) United States Atlantic ports north of New York, 3.76 cents.

(3) United States Atlantic ports south of Cape Hatteras and United States Gulf of Mexico ports, 3.73 cents.

(4) United States Pacific Coast ports, 3.74 cents less the customary deduction. Such deduction must be submitted to and approved by the Office of Price Administration as to amount before deliveries may be accepted.

(5) In the event that two or more ports of loading shall be used in Cuba, .01c per pound may be added to the above maximum prices.

(b) Maximum prices per pound for continental United States raw cane sugars of 96 degrees polarization shall be as follows:

The maximum prices for such sugars are established at the raw sugar mill and shall be calculated by deducting from the maximum price duty paid cost and freight basis payable for Cuban sugars of like test at the nearest customs port of entry in the area in which the raw sugar mill is located the transportation charge per pound based on the published freight rate from such sugar mill to the refinery nearest freightwise to such raw sugar mill. The maximum price is f.o.b. the conveyance for delivery to the refinery from the raw sugar mill. The maximum price delivered to the refinery shall be this maximum raw sugar mill price plus actual transportation charges from said raw sugar mill to the refinery processing such sugar.

(c) Adjustment for polarization:

The maximum prices specified herein shall be adjusted by making allowances per pound for each degree of polarization above or below 96 degrees (fractions of a degree in proportion) in accordance with the method customarily used prior to August 14, 1941. It is not required that such methods be used. However, the maximum prices for the various tests shall not exceed the prices obtained by applying such method for sugars of like test.

(Executive Orders Nos. 8734, 8875, 6 Fed. Reg. 1917, 4483). This amendment No. 2 shall become effective January 5, 1942. Issued this 3rd day of January, 1942.

(Signed) Leon Henderson
Administrator.

## OPM Order Provides Rating for Farm Machinery, Repair Parts

(*Official Release*)

The new farm machinery order issued by the Office of Production Management provides the priority rating necessary for the manufacture of a supply of new farm implements and repair parts to supplement equipment now on farms for use in the production and harvest of 1942 crops, the U. S. Department of Agriculture pointed out recently.

The order assigns to manufacturers of farm machinery a high defense rating, A-3, to enable them to produce approximately 83 percent of new machinery and about 150 percent of repair parts based on the 1940 level.

As a further help to farmers, OPM has revised the Steel Warehouse Order, M-21-b, to provide a reasonably adequate supply of bale ties, nails and wire rope, the Office of Agricultural Defense Relations reported. A new classification of special value to agriculture was created in the Warehouse Order. It includes bale ties, nails, welding rod (uncoated), and wire rope with an A-9 rating provided to secure delivery of 100 percent of the amount supplied in the corresponding quarter of 1940. The warehouse may secure up to 140 percent if supplies are available, but the priority only extends to 100 percent.

Wire, woven fence wire, poultry netting, stucco netting, barbed wire, staples, fence posts and gates, tin and terne plate (short ternes), galvanized sheet and strip are protected by the A-9 rating up to 70 percent with a maximum 110 percent allowed.

The Department pointed out that farmers them-

selves do not need priority ratings to secure items covered either in the Warehouse Order or Farm Machinery Order, but should obtain their supplies from their usual sources.

The farm machinery order sets varying production limitations on different types of farm machinery, based on the 1942 Food for Freedom goals, estimated 1942 labor supply, and machinery already available.

OPM has keyed in the levels of farm machinery production with the Food for Freedom campaign, thus permitting a greater production of farm machinery which contributes directly to the planting and harvesting of crops in which increases are asked by the Department of Agriculture. Similarly, reductions were ordered in the production of farm implements used in making crops which do not require such a high level of production.

With definite limitations now placed on the manufacture of farm implements, farmers are being urged by USDA State and County Defense Boards to give immediate attention to the repair of their machinery. The Boards are pointing out that the OPM has purposely set aside metals to produce 150 percent of repair parts so that the farm machinery repair campaign might be accelerated.

## Public Hearing Set to Allot 1942 Quota Supplies of Raw Cane Sugar

(*Official Release*)

A public hearing to allot 1942 raw sugar supplies for further processing will be held at Washington, D. C., January 16, in the West Ballroom of the Shoreham Hotel at 10 a.m., the Department of Agriculture announced on January 3rd.

The purpose of the hearing is to receive evidence which will help the Secretary of Agriculture make a fair, efficient and equitable distribution of 1942 raw cane sugar quota supplies among refiners of mainland cane sugar and among persons who import or bring in offshore sugar for further processing.

Involved is sugar produced in the mainland cane area of Louisiana and Florida, and sugar brought in or imported from Hawaii, Puerto Rico, the Virgin Islands, Cuba and other foreign countries, according to the Sugar Division of the Agricultural Adjustment Administration.

Officials pointed out that this is the first time such allotments have been undertaken under the Sugar Act of 1937. In prior years, the allotment authority of the Secretary has been applied only to producers.

**FOR SALE**

GOLDEN RIDGE FACTORY INTACT

500 ton capacity, 6 foot mill; Corliss Engine; Mirlees-Watson Knives; Steel Carrier; Double Effects; 2 Vacuum Pans; Water Purification and Vacuum Pan Cooling Systems, Etc.

Contact Mr. H. M. Sevin,
Secretary-Treasurer,

WEBRE-STEIB CO., LTD.
Vacherie, La.

**PAUL, RICE & LEVY**
INCORPORATED

Wholesale
INDUSTRIAL, MILL & MARINE SUPPLIES

Day, Ra. 6123 Night, Fr. 2019

501-505 Poydras St.

New Orleans, - - La.

BETHLEHEM WIRE ROPE
O I C VALVES
GUILD & GARRISON PUMPS
INTERNATIONAL INDUSTRIAL PAINTS
CHESTERTON PACKING
K-TING MANILA ROPE
CONSOL OILS
VULCAN SOOT BLOWERS

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

LAMBORN & COMPANY, INC.
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

LE BOURGEOIS BROKERAGE CO.
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
HARRY L. LAWS & CO., Inc.
Brokers and Distributors
SUGAR and MOLASSES
SUGAR FUTURES
American Bank Building New Orleans, La.

GAY, SULLIVAN & CO., INC.
SUGAR
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

STAUFFER, ESHLEMAN & CO., LTD.
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
CYANAMID
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

INDUSTRIAL LUBRICANTS

BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
STANDARD OIL CO. OF LA.

FOR SUGAR CANE FINANCING
STATE AGRICULTURAL CREDIT CORPORATION, INC.
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

AMERICAN MOLASSES CO.
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LEGardeur Frank Youngman
R. J. LEGARDEUR & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

PENICK & FORD, LTD., INCORPORATED
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

STANDARD SUPPLY AND
HARDWARE CO., INC.
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

E. A. RAINOLD, INC.
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

We stand for the encouragement of Home Industries as against foreign Competition

Vol. 20 NEW ORLEANS, LA., FEFRUARY 1, 1942 No. 9

# Sugar in War Uniform

(*By C. J. Bourg*)

(*Rationing*)

Sugar has been selected as the food which will be first subjected to rationing. Consumers will be given ration cards, probably distributed through the post offices. We must admit the urge to write a powerful piece about the causes which have brought about a situation in the United States where sugar must be the first food selected for rationing. We resist the urge humbly as good citizens, because we are in the midst of a national emergency and rationing has been decided upon, even though the actual Order has not been issued or the date fixed for beginning the distribution of cards. The announcement on the rationing program in contemplation is as follows:

Consumption of sugar this year should average close to a pound per person per week but this doesn't mean that under the rationing plan now being developed it will be possible to buy that much per person each week for home use, Leon Henderson, administrator of the Office of Price Administration, said today.

Actually, initial sales under the plan may not be more than 3/4 pounds per week per person, since sugar will have to be provided for people who eat in hotels, restaurants, and institutions. Sugar so consumed will help to make up the annual total of 50 pounds per person.

Furthermore, Mr. Henderson pointed out that some sugar will have to be held back to meet unusual demands for home canning during the summer months and for the winter holidays. It may also be necessary at the outset of the plan to hold sales down so that existing stocks can be distributed equitably throughout the country, thus insuring adequate supplies in all areas.

"I can't stress too strongly," Mr. Henderson added, "that every housewife should begin now to reduce consumption of sugar in her home. Those who have hoards of sugar should stop buying and start using up their stocks since they will not be permitted under the plan to get more sugar until their supplies have been reduced to normal proportions.

"This is an opportunity for everyone to make a personal contribution to the war. The army and navy need alcohol derived from sugar to make smokeless powder. Saving on sugar means powder for our soldiers and sailors."

(*Price Control*)

Congress has finally adopted the Emergency Price Control Act of 1942. Section 206 provides that ceiling prices already established by the Administrator shall continue in effect until they are superseded by action taken pursuant to the new law. The provisions which directly concern sugar are reproduced below. Your attention is directed to the fact that parity for sugar beets and sugarcane will be determined by the Secretary of Agriculture, and we must await the announcement of this determination before we can know exactly the formula adopted by the Secretary. As the relationship between the price of raw sugar and the price of sugarcane is not the same relationship as exists between the raw sugar price and the price of sugar beets, the question yet to be resolved is whether the price of raw sugar will reflect 110% of parity on sugarcane or whether it will reflect 110% of parity on the prices of sugarcane and sugar beets combined. Until this is settled, it is not possible accurately to tell you what 110% of parity will mean to the grower in dollars and cents.

According to the tables inserted in the Congressional Record of January 27th based on figures secured from the Department of Agriculture, there must be an increase in the price of raw sugar in order to bring the price of sugarcane up to 110% of parity. The American Sugar Cane League is urging the Department of Agriculture to determine parity on sugarcane and the Office of Price Administration to announce the change in price as soon as possible

THE SUGAR BULLETIN

414 Whitney Bldg., New Orleans

Marcel J. Voorhies, Editor

Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
Subscription Price, 50 Cents per Year.

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE

President, W. C. Kemper, Franklin, La.

1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

EXECUTIVE COMMITTEE

W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

after the President signs the Price Control Act, so that the sugarcane growers of Louisiana will enjoy the benefit of such increases on the 1941 crop. Because growers will be paid for their sugarcane on the average price of raw sugar from October to April, the League is impressing upon Government officials the necessity for quick action if the growers are to obtain a better price as a result of the enactment of the Price Control Law.

## "Agricultural Commodities

"Sec. 3. (a) No maximum price shall be established or maintained for any agricultural commodity below the highest of any of the following prices, as determined and published by the Secretary of Agriculture: (1) 110 per centum of the parity price for such commodity, adjusted by the Secretary of Agriculture for grade, location, and seasonal differentials, or, in case a comparable price has been determined for such commodity under subsection (b), 110 per centum of such comparable price, adjusted in the same manner, in lieu of 110 per centum of the parity price so adjusted; (2) the market price prevailing for such commodity on October 1, 1941; (3) the market price prevailing for such commodity on December 15, 1941; or (4) the average price for such commodity during the period July 1, 1919, to June 30, 1929.

"(b) For the purposes of this Act, parity prices shall be determined and published by the Secretary of Agriculture as authorized by law. In the case of any agricultural commodity other than the basic crops corn, wheat, cotton, rice, tobacco, and peanuts, the Secretary shall determine and publish a comparable price whenever he finds, after investigation and public hearing, that the production and consumption of such commodity has so changed in extent or character since the base period as to result in a price out of line with parity prices for basic commodities.

"(c) No maximum price shall be established or maintained for any commodity processed or manufactured in whole or substantial part from any agricultural commodity below a price which will reflect to producers of such agricultural commodity a price for such agricultural commodity equal to the highest price therefor specified in subsection (a).

"(d) Nothing contained in this Act shall be construed to modify, repeal, supersede, or affect the provisions of the Agricultural Marketing Agreement Act of 1937, as amended, or to invalidate any marketing agreement, license, or order, or any provision thereof or amendment thereto, heretofore or hereafter made or issued under the provisions of such Act.

"(e) Notwithstanding any other provision of this or any other law, no action shall be taken under this Act by the Administrator or any other person with respect to any agricultural commodity without the prior approval of the Secretary of Agriculture; except that the Administrator may take such action as may be necessary under section 202 and section 205 (a) and (b) to enforce compliance with any regulation, order, price schedule or other requirement with respect to an agricultural commodity which has been previously approved by the Secretary of Agriculture.

"(f) No provision of this Act or of any existing law shall be construed to authorize any action contrary to the provisions and purposes of this section." (*Raw Sugar Price*)

The Price Schedule No. 16, which establishes a ceiling on raw cane sugars, has been amended in several particulars to provide answers as to authorized settlements on contracts between raw sugar mills and refiners. The ceiling price for Louisiana raw sugars remains at 3.73c; but our readers will be interested in the statement released by OPA explaining the amendments, some of which apply exclusively to the raw sugar mills of Louisiana. The Price Schedule, as changed by Amendment No. 3, and the explanation issued by OPA are printed in full, as follows:

Amendment No. 3 to Price Schedule No. 16, Raw Cane Sugar, was announced by Leon Henderson, Administrator of the Office of Price Administration, giving approval to pricing terms in raw sugar contracts.

This amendment effective Monday, January 26, permits the seller to receive the ceiling price in effect at the time the contract was signed, or the ceiling price in effect at the time of arrival of the vessel at quarantine. The prices between these dates may be averaged, but the average price may not exceed the ceiling in effect on the date of arrival.

This effect of the amendment is to prohibit contract terms which provide for pricing raw sugars at dates extending beyond the time of delivery and pricing arrangements which require the buyer to replace by some later date at the present ceiling price, sugars now bought at the ceiling price. Any attempt to evade the maximum ceiling price established in the order by direct or indirect means is declared to be a violation.

The amendment allows mainland raw sugar mills, in pricing their contracts, to settle with raw sugar

buyers on the basis of the season average price as determined by the pricing period and formula established by the Department of Agriculture. Settlement of these contracts on a season average basis is a trade practice of long standing. For the settlement of current raw sugar contracts, therefore, the amendment approves contracts employing a pricing period commencing not later than October 17, 1941, nor extending beyond April 2, 1942.

With respect to contracts not employing the season average price, the same privilege of securing the time of arrival price as was extended to off-shore sugars, has been allowed mainland raw sugar mills.

Four important interpretations clarifying the existing sugar schedule were issued by OPA today in conjunction with the announcement of the amendment. The first interpretation affects mainland raw sugar buyers and sellers. The remainder concern the purchase and sale of off-shore sugars.

Certain mainland raw sugar mills have applied to OPA for approval of the price provisions in contracts entered into before August 14, 1941, on the grounds that such contracts should be exempted from the schedule because they were in existence prior to its effective date. The Administrator stated that it was the manifest intent of all season average contracts to secure the average price for the mainland cane sugar marketing season. To approve pre-schedule contracts because they were entered before August 14 would amount to creating a fictional distinction between such contracts and those entered after August 14. Equity demands placing all such contracts on the same basis, the Administrator ruled. Therefore, OPA will not grant exception for season average contracts entered prior to August 14.

The Administrator pointed out that Price Schedule No. 16 applies to all raw sugar entering into the United States, whether intended for domestic or export use. This interpretation is announced to correct a misapprehension on the part of some in the sugar trade who regard export sales as outside the terms of the schedule. Mr. Henderson stated that prices higher than the maximum established by Schedule No. 16 may be paid only upon express permission of O.P.A. Such permission has been granted in certain cases where sugars were needed for export purposes and were prohibited from entry as domestic consumption sugars by operation of the quotas establihed under the Sugar Act of 1937.

OPA repeated its announcement of October 30, 1941, to the effect that the cost of transferring funds shall, in all cases, be borne by the seller. This expense customarily has been absorbed by the seller and Price Schedule No. 16 has as one of its objects the continuance of contract terms.

In another interpretation, the Administrator stated, OPA expects sellers and buyers to follow the trade practice of making the usual deductions for sugar delivered in second hand burlap bags. The Office has been asked by several buyers and sellers recently whether a deduction had to be made for delivery in second hand bags. Mr. Henderson stated that the sale of sugar in second hand burlap bags at $3.74 cost and freight duty paid, New York, would be considered a definite violation of the order.

In a general statement, Mr. Henderson served notice on the trade that any attempt to shift the incidence of a cost which has customarily been borne by the buyer or the seller to the other party of the contract will be construed as a violation of Price Schedule No. 16.

# Amendment No. 3 to Price Schedule No. 16—Raw Cane Sugar

Sections 1334.1 and 1334.9 are hereby amended and Section 1334.10 is hereby added to read as follows:

1334.1 *Maximum prices for raw cane sugars.* On and after August 14, 1941, regardless of the terms of any contract of sale or purchase, or other commitment, except as may be provided in a supplement or supplements to this Schedule, no person shall sell, or offer to sell, deliver or transfer raw cane sugars to any person, and no person shall buy, offer to buy, or accept delivery of raw cane sugars from any person, at prices higher than the maximum prices set forth in Appendix A, incorporated herein as 1334.9. These prices are gross prices before discounts of any nature are deducted, and they include all commissions and all other charges.

1334.9 *Appendix A—Maximum prices for raw cane sugars.*

(a) Maximum prices per pound for raw cane sugars from offshore producing areas of 96 degrees polarization duty paid cost and freight basis shall be as follows:

(1) United States Atlantic ports north of Cape Hatteras to and including New York, 3.74 cents.

(2) United States Atlantic ports north of New York, 3.76 cents.

(3) United States Atlantic ports south of Cape Hatteras and United States Gulf of Mexico ports, 3.73 cents.

(4) United States Pacific Coast ports, 3.74 cents less the customary deduction. Such deduction must be submitted to and approved by the Office of Price Administration as to amount before deliveries may be accepted.

(5) In the event that two or more ports of loading shall be used in Cuba, .01 cent per pound may be added to the above maximum prices.

(6) With respect to any sale of the sugars included in this paragraph (a) for forward delivery, a contract may provide for the payment of an adjusted price not to exceed the maximum price in effect at the time of arrival at quarantine at the port of destination, except that an annual or other similar long term contract providing for several deliveries during the term of such contract may employ a method of averaging prices during such term: *Provided,* That (i) the average price for such term does not exceed a price obtained by averaging the maximum prices in effect during such term in accordance with the method employed in such contract; (ii) such contracts customarily were made between the parties thereto and such method of averaging prices was customarily used therein; and (iii) such contracts and evidence of the applicability of this exception thereto are submitted to and approved by the Office of Price Administration prior to the commission of any act in performance of such contract.

(b) Maximum prices per pound for continental United States raw cane sugars of 96 degrees polarization shall be as follows:

(1) The maximum prices for such sugars are established at the raw sugar mill and shall be calculated by deducting from the maximum price duty paid cost and freight basis payable for Cuban sugars of like test at the nearest customs port of entry in the area in which the raw sugar mill is located the transportation charge per pound based on the pub-

lished freight rate from such raw sugar mill to the refinery nearest freightwise to such raw sugar mill. This maximum price is f.o.b. the conveyance for delivery to the refinery from the raw sugar mill. The maximum price delivered to the refinery shall be this maximum raw sugar mill price plus actual transportation charges from said raw sugar mill to the refinery processing such sugar.

(2) With respect to any sale of the sugars included in this paragraph (b):

(i) A contract may provide for averaging the prices during the season in accordance with the customary method: Provided, That (*a*) the average price for the season does not exceed a price obtained by averaging the maximum prices in effect during the season in accordance with such method; and (*b*) the season used in determining the average price commences not later than the date fixed by the United States Department of Agriculture pursuant to the Sugar Act of 1937, as amended, as the beginning of the sugarcane marketing season and terminates not later than the date fixed by the United States Department of Agriculture pursuant to said Act as the termination of said season.

(ii) A contract may provide for the payment of an adjusted price not to exceed the maximum price in effect at the time of arrival at the buyer's warehouse or place of business. In the event that more than one delivery is made pursuant to the same contract, the adjustment of the price and the payment thereof shall be made in respect to each delivery separately.

*(a) Adjustment for polarization:*

The maximum prices specified herein shall be adjusted by making allowances per pound for each degree of polarization above or below 96 degrees (fractions of a degree in proportion) in accordance with the method customarily used prior to August 14, 1941. It is not required that such method be used. However, the maximum prices for the various tests shall not exceed the prices obtained by applying such method for sugars of like test.

1334.10 *Evasion.* The price limitations established by this Schedule shall not be evaded whether by direct or indirect methods in connection with a purchase, sale, delivery, or transfer of raw cane sugars, alone or in conjunction with any other commodity, or material, or by way of any commission, service, transportation, or other charge, or discounts, premium, or their privilege, or by tying-agreement, or other trade understanding, or by shifting the incidence of a cost which customarily has been borne by the buyer or the seller to the other party to the contract, or by any other means.

(Executive Orders Nos. 8734, 8875, 6 Fed. Reg. 1917, 4483).

This amendment No. 3 shall become effective January 26, 1942.

Issued this 26th day of January, 1942.

(Signed) LEON HENDERSON,
Administrator

## Mr. Voorhies in Washington

Mr. Marcel J. Voorhies, General Manager of the American Sugar Cane League, left New Orleans for Washington on January 24th to confer with officials of the United States Department of Agriculture about raising sorghum in the Louisiana sugar district for the production of alcohol.

# General Preference Order No. M-55 As Amended January 24th, 1942

*(To Conserve the Supply and Direct the Distribution of Direct-Consumption Sugar)*

General Preference Order No. M-55 is hereby amended to read as follows:

WHEREAS, it appears that the fulfillment of requirements for the defense of the United States will result in a shortage in the supply of direct-consumption sugar for the combined needs of defense, private account and export, and it is necessary in the public interest and to promote the defense of the United States, to conserve the supply and direct the distribution of direct-consumption sugar.

NOW, THEREFORE, IT IS HEREBY ORDERED THAT:

1032.1 GENERAL PREFERENCE ORDER NO. M-55

(a) *Applicability of Priorities Regulation No. 1.* This Order and all transactions affected thereby are subject to the provisions of Priorities Regulation No. 1 (Part 944), as amended from time to time, except to the extent that any provision hereof may be inconsistent therewith, in which case the provisions of this Order shall govern.

(b) *Definitions for the Purposes of this Order.*

(1) "Person" means any individual, partnership, association, business trust, corporation, governmental corporation or agency, or any organized group of persons, whether incorporated or not.

(2) "Sugar" means any grade or type of saccharine product derived from sugar-cane or sugar beets, containing sucrose, dextrose, or levulose.

(3) "Raw Sugar" means any sugars which are to be further refined or improved in quality.

(4) "Direct-Consumption Sugar" means any sugar which is not to be further refined or otherwise improved in quality and includes raw sugar delivered to any Receiver; but sugar in liquid form which contains non-sugar solids (excluding any foreign substance that may have been added) equal to more than 6 percentum of the total soluble solids, and sirup of cane juice produced from sugarcane grown in continental United States are not included.

(5) "Primary Distributor" means any person who manufactures or imports into continental United States (excluding Alaska) direct-consumption sugar or the agent of any such person.

(6) "Secondary Distributor" means any Receiver who, in 1941 sold or delivered sugar to another Receiver.

(7) "Receiver" means any person who in 1941 bought or accepted delivery of direct-consumption sugar from any Primary Distributor, or who in 1941 bought or accepted delivery from any source of raw sugar to use it in the manufacture of any product for human consumption, other than Direct-Consumption sugar.

(8) "Frozen Sugar" means any sugar which a Receiver has been prohibited from using or reselling by Paragraph (c) (4) of General Preference Order M-55, dated December 13, 1941, or by any other order of the Director of Priorities.

(c) *General Restrictions.*

(1) No Primary Distributor shall deliver Direct-Consumption Sugar to any person with knowledge or reason to believe that such person is not entitled to accept delivery thereof pursuant to this Order.

(2) Except as provided in paragraph (d) hereof, no person other than a Receiver shall receive delivery of any Direct-Consumption Sugar from a Primary Distributor; and no Receiver shall accept delivery of Direct-Consumption Sugar from any source, except as permitted by this Order.

(3) Any Receiver who, in the usual course of his business, resells to purchasers other than ultimate household consumers more than 50 percent of the Direct-Consumption sugar he buys shall resell sugar equitably among such purchasers and shall not favor purchasers who purchase other products from him nor discriminate against purchasers who do not purchase other products from him.

(d) *Quota Restrictions and Exceptions thereto.*

(1) *Persons in Business in Corresponding Period in 1941.* In any period specified by the Director of Priorities, any Receiver may accept delivery of a quota constituting such percentage of his use or resale of Direct-Consumption Sugar in the corresponding period of 1941 as the Director of Priorities may from time to time determine. Any such quota must be adjusted pursuant to paragraph (f) of this Order.

(2) *Persons not in Business in Corresponding Period in 1941.* Any Receiver who was not in business during the whole of the corresponding period of 1941, but was in business during the whole of the months of October, November, and December, 1941, may in any one month in 1942 accept delivery of a quota of Direct-Consumption Sugar equal to such percentage of the average of his use and resales in such months of 1941 as the Director of Priorities may determine; or if he was not in business during the whole of such months of 1941, he may use as a basis to determine his quota that percentage of the average of his monthly use or resale during each of such months of 1941 in which he was in business during the entire month. Any such quota must be adjusted pursuant to paragraph (f) of this Order.

(3) *Advance or Deferred Delivery.* Nothing in this Order shall be construed to prohibit acceptance of any delivery constituting part of the quota of any Receiver for any period within ten days prior to the beginning of such period. To avoid rail deliveries in less than carload lots (defined for the purposes of this Order as less than four hundred bags East of Chicago, less than six hundred bags Chicago and West of Chicago) a Receiver may receive by rail the carload lot or lots nearest his quota for any period and adjust the excess or deficiency in determining his quota for the next ensuing period.

(4) *Quota of Receivers having Frozen Sugar.* The quota of any Receiver shall be reduced according to the amount of any Frozen Sugar in his possession or control.

(5) *Deliveries not charged against Quota.* Notwithstanding the foregoing limitations, any primary distributor may deliver Direct-Consumption Sugar to any person, and any Receiver may accept delivery of Direct-Consumption Sugar without charging it against his quota, if such delivery or acceptance is specifically authorized by the Director of Priorities, or if such sugar is to be used or to be physically incorporated in materials to be used to fill actual orders by or contracts with:

(i) The Defense Supplies Corporation.

(ii) The War and Navy Departments.

(iii) The United States Maritime Commission.

(iv) The government of any of the following countries: the United Kingdom, Canada, and other dominions; Crown Colonies and Protectorates of the British Empire, Belgium, China, Greece, the Kingdom of the Netherlands, Norway, Poland, Russia and Yugoslavia.

(v) Any Agency of the United States Government for materials, supplies, or equipment to be delivered to, or for the account of, the government of any country listed above or any other country, including those in the Western Hemisphere, pursuant to the act of March 11, 1941, entitled "An Act to Promote the Defense of the United States." (Lend-Lease Act.)

(vi) The American Red Cross.

(vii) Any person requiring supplies necessary to manufacture health supplies as defined in preference rating order No. P-29 as it may be amended from time to time.

(viii) Any person, for retail sale, on military or naval reservations or naval vessels, to military or naval personnel.

(ix) Any person operating an ocean going vessel, documented under the laws of the United States and engaged in transportation of cargo or passengers in the foreign, coastwise, or inter-coastal trade, for necessary supplies for such vessels.

(x) Any canner or processor, to furnish supplies to enable him to pack fruits or vegetables, provided that he has complied with all orders of the Office of Production Management with reference to the conservation of Sugar, and further provided that any such canner or processor must file with his Supplier, from whom he is accepting delivery of Direct-Consumption Sugar, a written statement in substantially the following language, manually signed by a responsible official.

"The undersigned intends to pack (quantity) of ( ). To do this ( ) bags of sugar are needed. I have in my possession or under my control ( ) bags of Direct-Consumption Sugar. I request delivery of ( ) bags of Direct-Consumption Sugar representing the difference between the quantity of Direct-Consumption Sugar in my possession or under my control and the quantity I need in order to pack the commodity referred to above. I further represent that I have complied with all orders of the Office of Production Management with reference to the conservation of sugar and that I intend to comply with all future orders of the Office of Production Management with reference to such matters.

Name.....
By....."

A copy of such writing must be filed with the Director of Priorities. Such statement shall constitute a representation to the Office of Production Management and the Supplier that the signer is entitled to receive the amount stated. The Supplier shall be entitled to rely on such representation, unless he knows or has reason to believe it to be false.

Any receiver using or reselling Direct-Consumption Sugar pursuant to this subparagraph (5), shall at the end of such quota period notify the Director of Priorities in writing of the amount of such use or resale and the person or persons to whom he has sold.

(e) *Frozen Sugar.*

Sugar frozen by General Preference Order M-55 or by any other Order of the Director of Priorities, may be used or resold,

(i) For the purposes set forth in paragraph (d) (5) above.

(ii) By any Receiver, to the extent that his quota has been reduced as prescribed by paragraph (d)(4) above.

But such frozen sugar shall not be otherwise used or resold and shall remain subject to disposition by order of the Director of Priorities.

(f) *Election between Primary and Secondary Distributors.*

(1) *Election Required.* After March 1, 1942, no person shall accept delivery of Direct Consumption Sugar from both Primary Distributors and Secondary Distributors. Any Receiver who in 1941 purchased or accepted delivery of sugar from both Primary Distributors and from Secondary Distributors must elect prior to February 20, 1942, whether during the period from March 1, 1942, to December 31, 1942, to accept delivery of Direct-Consumption sugar from Primary Distributors or Secondary Distributors.

(2) *Election not to Accept Sugar from Secondary Distributors.* In the event that such Receiver elects not to accept delivery of Direct-Consumption Sugar from Secondary Distributors after March 1, 1942, he shall give notice of such election prior to February 20, 1942, on a form to be prescribed by the Office of Production Management, to each Secondary Distributor from whom he accepted delivery of Direct-Consumption Sugar in 1941. Each Secondary Distributor who shall receive such notice shall, in calculating the quantity of Direct-Consumption Sugar which he sold in any period of time in 1941 for the purpose of determining the quantity of Direct-Consumption Sugar to which he is entitled in the corresponding period of time in 1942, pursuant to paragraph (d) of this Order, deduct the quantity of Direct-Consumption Sugar he sold during such period of time to the person giving him such notice.

(3) *Election not to Accept Sugar from Primary Distributors.* In the event that any such Receiver elects no longer to accept delivery of Direct-Consumption Sugar from Primary Distributors, after March 1, 1942, he shall give notice of his election to any Secondary Distributor, on a form to be prescribed by the Office of Production Management, stating the quantities of sugar of which he accepted delivery during each month from March 1, 1941, to December 31, 1941. Any Secondary Distributor who shall receive such notice may, in calculating the quantity of Direct-Consumption Sugar which he sold in any period of time in 1941 for the purpose of determining the quantity of Direct-Consumption Sugar to which he is entitled in corresponding period of time in 1942 pursuant to paragraph (d) of this Order, add the quantity of Direct-Consumption Sugar which the person giving such notice received from Primary Distributors during such period of time, but now elects to receive from him.

(g) *Applicability of Order.*

This Order applies only to deliveries in or for the continental United States, excluding Alaska; provided, however, that any person who imports Direct-Consumption Sugar shall be deemed to accept delivery thereof on its arrival in the continental United States, excluding Alaska. This Order does not apply to deliveries for direct export from the United States of America, if such export shall have been duly licensed by the Administrator of Export Control.

(h) *Multiple Branch Companies.*

Companies having a number of plants, divisions, branches, or subsidiaries may elect whether to treat each or any such plant, division, branch, or subsidiary as a separate person for the purposes of this Order, but, having elected, shall adhere to such election for all purposes.

(i) *Records.*

Each Person participating in any transaction to which this Order applies shall keep and preserve for a period of not less than two years accurate and complete records of his inventories of the Material or Materials to which such Order relates and of the details of all transactions in such Materials. Such records shall include the dates of all contracts or purchase orders accepted, the delivery dates specified in such contracts or purchase orders, and in any preference rating certificates accompanying them, the dates of actual deliveries thereunder, description of the Material covered by such contracts or purchase orders, description of deliveries by classes, types, quantities, weights and values, the parties involved in each transaction, the preference ratings, if any, assigned to deliveries under such contracts or purchase orders, details of Defense Orders and all other rated orders either accepted or offered and rejected, and other pertinent information.

(j) *Audit and Inspection.*

All records required to be kept by this Order shall, upon request, be submitted to audit and inspection by duly authorized representatives of the Office of Production Management.

(k) *Reports.*

Each person participating in any transaction to which this Order applies shall execute and file with the Office of Production Management such reports and questionnaires as said office shall from time to time request.

(l) *Violations.*

Any Person who wilfully violates any provision of this Order, or who by any act or omission falsifies records to be kept or information to be furnished pursuant to this Order, may be prohibited from receiving further deliveries of any Material subject to allocation, and such further action may be taken as is deemed appropriate, including a recommendation for prosecution under section 55 (A) of the Criminal Code (18 U.S.C. 80).

(m) *Appeal.*

Any Person affected by this Order who considers that compliance herewith would work an exceptional and unreasonable hardship upon him, may appeal to the Office of Production Management, setting forth pertinent facts and the reasons such person considers that he is entitled to relief. The Director of Priorities may thereupon take such action as he deems appropriate.

(n) *Communications to Office of Production Management.*

All reports required to be filed hereunder, and all communications concerning this Order, shall, unless otherwise directed, be addressed to:

"Office of Production Management,
Washington, D. C. Ref: M-55"

(o) *Effective Date.*

(P.D. Reg. 1 Amended, Dec. 23, 1941, 6 F.R. 6680; O.P.M. Reg. 3 Amended, Sept. 2, 1941, 6 F.R. 4865; E.O. 8629, Jan. 7, 1941, 6 F.R. 191; E.O. 8875, Aug. 28, 1941, 6 F.R. 4483; sec. 2(a), Public No. 671, 76th Congress, Third Session, as amended by Public No. 89, 77th Congress, First Session.)

Amended this 24th day of January, 1942.

J. S. KNOWLSON,
Acting Director of Priorities.

## Supplementary Order No. M-55-A

(a) The Director of Priorities hereby determines

that during the month of February, 1942, the quota of Direct-Consumption Sugar Permitted Receivers under Paragraph (d) of Order No. M-55, as amended, shall be 80% of use or resale during the base period of 1941 as prescribed by the said Order No. M-55.

(b) This Order shall take effect immediately.

(P.D. Reg. 1 Amended, Dec. 23, 1941, 6 F.R. 6680; O.P.M. Reg. 3 Amended, Sept. 2, 1941, 6 F.R. 4865; E.O. 8629, Jan. 7, 1941, 6 F.R. 191; E.O. 8875, Aug. 28, 1941, 6 F.R. 4453; sec. 2(a), Public No. 671, 76th Congress, Third Session, as amended by Public No. 89, 77th Congress, First Session.)

Issued this 24th day of January, 1942.

J. S. KNOWLSON,
Acting Director of Priorities.

## Shortages May Mean Change in Containers for Farm Products

*(Official Release)*

Many farmers and packers of farm products will find it necessary to change their packing and shipping practices because of the limited supplies of container materials, such as burlap or cotton fabric bags and heavy paper bags and boxes, the U. S. Department of Agriculture said recently.

The shortage of burlap and heavy paper bags is most serious. Greater use of wooden containers and cotton or heavy paper bags in 1942 is recommended wherever possible. Packers of agricultural products are urged to follow the container supply situation closely and make necessary plans.

A large part of the burlap supply—most of which comes from India—is used each year for packing agricultural products. The amount of burlap imported—two-thirds of which is required for military uses—may be seriously reduced. Conservation of the present burlap supply, however, will offer some relief. Burlap is very durable and, if carefully handled, may be re-used many times.

Cotton bags would be quite satisfactory substitutes for burlap in most uses. But, their increased use is limited by war needs such as tents, uniforms and sandbags, which have placed a heavy burden on cotton fabric manufacturers.

In recent years there has been a shift to heavy-duty paper bags, particularly for packaging potatoes, flour, cement and fertilizer. War has created a shortage in materials for these bags, but less essential uses for paper will be eliminated and it is expected substantial amounts of paper will be available as a substitute for burlap.

Use of some of the more common wooden containers has been declining for several years. As a result, there is unused production capacity. The manufacture of barrels, baskets, boxes of various kinds, and other wooden containers can be increased, although in some cases current supplies of cured staves, veneer and shook are limited. In the event of a greater use of wooden containers, the time required between ordering the container and its delivery is likely to be longer.

Increased production of veneer baskets can be obtained almost immediately. Production probably could be doubled if logs and labor can be obtained to operate present plants. For boxes, for the most part, advance notice of several months should be given lumber producers.

More planning is necessary for wooden containers than for other kinds. Lumber, veneer, plywood, and barrel staves have to be manufactured and seasoned, and then shipped to where the containers are to be assembled and used.

### Louisiana Production

Final production figures on the Louisiana crop have been furnished to the Cane Products Trade Association by the A.A.A. office. These figures show that the 1941-42 Louisiana cane crop produced 321,004 short tons of sugar, raw value, from 3,950,665 tons of cane, for an average of 163.4 pounds of sugar per tons of cane ground. Sugar in the Magma is estimated at 1,782 tons, bringing the total to 322,786 short tons, raw value. The figures on all of the grades of sugar, syrup, and molasses, which are being gathered by the American Sugar Cane League, are not yet completed.

**FOR SALE**

**GOLDEN RIDGE FACTORY INTACT**

**500 ton capacity, 6 foot mill; Corliss Engine; Mirlees-Watson Knives; Steel Carrier; Double Effects; 2 Vacuum Pans; Water Purification and Vacuum Pan Cooling Systems, Etc.**

**Contact Mr. H. M. Sevin,**
Secretary-Treasurer,

**WEBRE-STEIB CO., LTD.**
**Vacherie, La.**

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

LAMBORN & COMPANY, INC.
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

LE BOURGEOIS BROKERAGE CO.
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
HARRY L. LAWS & CO., INC.
Brokers and Distributors
SUGAR and MOLASSES
SUGAR FUTURES
American Bank Building New Orleans, La.

GAY, SULLIVAN & CO., INC.
SUGAR
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

STAUFFER, ESHLEMAN & CO., LTD.
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline
Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
CYANAMID
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

INDUSTRIAL LUBRICANTS

BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
STANDARD OIL CO. OF LA.

FOR SUGAR CANE FINANCING
STATE AGRICULTURAL CREDIT CORPORATION, INC.
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

AMERICAN MOLASSES CO.
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LEGardeur Frank Youngman
R. J. LEGARDEUR & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

PENICK & FORD, LTD., INCORPORATED
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

STANDARD SUPPLY AND
HARDWARE CO., INC.
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

E. A. RAINOLD, INC.
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

Chemistry Library,
Louisiana State University,
University, La.

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 20 NEW ORLEANS, LA., FEBRUARY 15, 1942 No. 10

# Sugar At War

*(By C. J. Bourg)*

## Secretary Urges More Domestic Sugar

The Secretary of Agriculture issued an appeal on January 29th to the growers of sugarcane and sugar beets in the United States to increase their production of sugar. Referring to the years of record production in the United States, 1940 for the Beet Sugar Area and 1938 for the Mainland Cane Area, the Secretary emphasized that the prospects in 1942 for higher returns to growers are much better than existed in the years when the highest production was obtained. Considering the patriotic duty of every citizen to produce foods and munitions, the sugar shortage has placed a special obligation on each producer of sugar to step up production. As the Secretary points out, the incentive of better prices and improved farm income, added to the patriotic duty, encourages the hopes and outlook for 1942.

In the case of sugar beets, the announcement of the Secretary of Agriculture is already stimulating farmers to contract for additional beet acreage this year; and a very substantial increase in planted acres should bring about a full crop next Fall. Unfortunately, the Secretary's announcement has come somewhat late for sugarcane growers to show results in the 1942 crop, as plantings have been completed and there is no seed left. The statement will serve to encourage sugarcane growers to the most intense cultivation and fertilization on this year's crop and to prepare their lands thoroughly for sugarcane, planning the use of all idle acreage in such manner as to bring about a maximum production in 1943, limited only by the factory capacity existing in the Louisiana sugar belt.

In view of the significance to producers and consumers of the appeal made by the Secretary of Agriculture for expanded production of sugar in the United States, we give the release in full, so that all of our members may read and remember the encouragements towards higher production offered and recited by the Secretary:

"An increase in the production of sugar in the United States is hoped for this year since the unprecedented distribution of sugar in 1941 reduced the 'ever-normal granary' sugar supply by more than 1,000,000 tons, and because of the anticipated curtailment in sugar supplies from some of the offshore areas, Secretary of Agriculture Claude R. Wickard said. Although production in the offshore areas of this hemisphere is expected to increase, supplies for this market from this source are expected to be reduced because of the sugar needs of our Allies, and because of the utilization of large quantities of sugarcane for industrial alcohol for the manufacture of explosives and other war materials.

"Higher sugar prices, increased government payments, and the absence of any limitations on production of sugar beets and sugarcane should result in expanded production, the Secretary said. Wholesale refined sugar prices, under the price ceilings fixed by the Office of Price Administration, are approximately $1.00 per hundredweight higher than the average of the period 1938-1940. The base rate of conditional payments to domestic sugar producers has been increased 33-1/3 percent, or from 60c to 80c per 100 pounds of sugar under legislation recently approved by the President extending the Sugar Act of 1937 for another three years.

"On the basis of present sugar prices and the increased conditional payments, sugar beet producers should average between $8.50 and $9.25 per ton of beets on their 1942 crop, compared with an average of $6.75 from the 1938, 1939, and 1940 crops. The returns of Louisiana sugarcane growers, which are further augmented as a result of their sharing in the

THE
SUGAR BULLETIN
414 Whitney Bldg., New Orleans
Marcel J. Voorhies, Editor
Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
Subscription Price, 50 Cents per Year.

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE
**President, W. C. Kemper, Franklin, La.**
1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

**EXECUTIVE COMMITTEE**
W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

increased income from the sale of blackstrap molasses, are expected to average between $5.20 and $5.60 per ton of sugarcane, compared with an average of $3.75 on the last three crops marketed. It is anticipated that the income of independent growers in Florida will increase from an average of $4.25 per ton of cane from the last three crops sold to approximately $6.00 per ton.

"During the past four years, the average production of the domestic beet sugar area has been approximately 1,758,000 tons, raw value, with an all-time record production of 1,894,000 tons in 1940. The mainland cane area has averaged approximately 463,000 tons annually during this period, a record production of 583,000 tons having been reached in 1938."

## Fertilizer

In connection with the prospects for the 1942 crop, a subject of major concern to all sugarcane growers has been the availability of fertilizer. Some weeks ago, the OPM ordered that all stocks of sodium nitrate be frozen, but we have been assured by the Office of Agricultural Defense Relations that the purpose of this freezing order was primarily to determine how much sodium nitrate may be available to farmers this year and then for the Government to allocate the supplies in such manner that each farming area and each farmer will receive a proportionate share. Allocations will be made from month to month, and we have submitted the needs and requirements of the sugarcane growers of Louisiana for consideration in connection with the fertilizer to be allocated for March delivery.

As a result of the survey made by the Office of Agricultural Defense Relations, we are informed that Cyanamid will be available in limited quantities, not to exceed 20 percent of the amounts used last year. In the case of sodium nitrate, it is estimated that at least 50 percent of the requirements will be delivered. The balance of the fertilizer needs will be filled by ample quantities of mixed fertilizer. It may be that no farmer and no farming area will receive all of the kind of fertilizer desired, still it should be very reassuring to know that there is a committee in Washington whose job and purpose it is to supervise an equitable distribution of the different kinds of fertilizer among all farmers in each farming area. This committee is operating on the assumption that food is an essential in national defense, and producers of foods are entitled to priorities equal to the producers of ammunition. There will necessarily be restrictions, and no one can obtain as large an amount of fertilizer as he might desire to order; but, considering the restraints of war and the necessity for adjustments, there will be relief. Sugar has been recognized both because of its energy-producing value and because there is a shortage in supplies due to war conditions

## Tractor Tires

Most sugarcane growers have in recent years mechanized their farms and have come to depend in large measure upon tractor-drawn vehicles and implements. For that reason, the tire rationing plan which has been set in motion presents another problem. As in the case of fertilizer, the American Sugar Cane League has established contacts with the proper officials in Washington to urge that provisions be made whereby the growers will not be hampered in their desire to respond to the request of the Secretary of Agriculture that more sugar be produced in the United States. Assurances have been given to the effect that high-lug tires already manufactured will be available to farmers, largely because there is no other use to which these specially-sized tires can be put. It is hoped that the stocks already manufactured may be sufficient to take care of the needs for the 1942 crop season, at least to the extent of replacements and maintenance. It is with regard to new tires and continued manufacture of high-lug tires that the industry is meeting with considerable difficulty. In fairness to all concerned, it should be realized that the shortage of tires has been brought about exclusively by the war and by the Army and Navy extraordinary needs. The regulations of Government with respect to tires must be accepted as intended to insure a sufficient supply of tires and rubber goods for first-line defense and also to take care of those industries engaged in defense work, who might not be able readily and efficiently to turn to substitutes. Our members may be assured that the facts are being presented to the Government officials, who are giving full consideration, subject only to the limitations brought about by the tremendous demands of the Army and Navy.

## Rationing

Persons who have built up hoards of sugar will have stamps torn out of their ration books to cover the hoards, thus depriving those persons of the right to buy any more sugar until their hoards are used up, under the rationing plan to go into effect within a few weeks, Leon Henderson, administrator of the

Office of Price Administration, announced February 6.

"In the meantime," Mr. Henderson said, "every patriotic citizen should reduce his normal sugar consumption by at least a third. Those who have hoards should stop buying more sugar and start using up their hoards. Retailers should continue limiting sales to individuals until the formal rationing plan is put into effect. And consumers should remember that the retailers are not responsible for the shortage."

Registration of consumers by teachers in the public schools and issuance of War Ration Book No. 1 will start as soon as the enormous job of printing and distributing the books have been completed, Mr. Henderson stated. Local rationing boards will have general supervision over the registration of consumers and the issuance of the books.

One book will be printed for each person in the country regardless of age. Each book will carry in it 28 stamps. The stamps will be numbered and can be used only to purchase sugar during a designated week. When a sugar purchase is made the proper stamp will be torn from the book. Each stamp will entitle the book holder to purchase a definite amount of sugar—probably three-quarters of a pound per person per week. The exact amount will be determined when the War Production Board decides how much is to be made available each week for the thousands of retail stores throughout the country.

When consumers apply for War Ration Book No. 1, they will be required to make a certified statement as to the amount of sugar per person in their family unit. If there is more than 2 pounds of sugar per person in possession of the family the balance will be considered as hoarded sugar and an appropriate number of stamps will be removed from the book at the time of registration. The amount of sugar per person in the family hoard will be divided by the amount of sugar which can be purchased with each stamp to determine how many stamps must be removed from the book. This will make it impossible for the book holder to buy any sugar until his or her supply is used up.

The application which the applicant must sign will carry on its face the warning that false reports to any Government agency subjects the person making the report to severe penalties under the United States Criminal code. These penalties may run as high as $10,000 fine or 10 years imprisonment.

It is planned to require one person to register for each family unit, the latter including the mother, father, children, and wards. Other persons living in the household must register separately for their books except in such unusual cases at that of invalids, etc.

Persons living in a household but not a part of the family unit will not be considered as possessing any part of the stock of sugar held by the family unit and stamps will not be removed from their books to cover any part of such hoards.

When selling sugar storekeepers will be required to tear a stamp out of the buyer's book. These stamps will then be pasted on a card by the storekeeper. These cards will then be turned in to the supplier of sugar for the store in question, thus entitling the storekeeper to replenish his stock for sales in the following week.

### WPB to keep supply moving

The rationing plan is being developed in full consultation with the food branch of the War Production Board whose responsibility it is to see to it that supplies of sugar in the country are so distributed that there is sugar in all stores when the rationing plan goes into effect and that supplies are kept flowing to stores in sufficient amount each week to meet requirements of persons who will be seeking to buy sugar in the amounts permitted under the rationing plan.

A. E. Bowman, head of the Sugar Section of the Food Supply Branch of the WPB, February 3 appealed to grocery stores and other sugar retailers to take care of small industrial users who have bought sugar from them in the past.

Since the development of a sugar shortage several weeks ago, many of such small industrial users—such as a smaller bottler, or a neighborhood bakery or confectionery—are having trouble getting sufficient sugar on which to operate, according to reports received by the Sugar Section.

## General Preference Order M 54 As Amended January 23rd 1942

*(To Conserve the Supply and Direct the Distribution of Molasses)*

Section 1031.1 (General Preference Order No. M-54) is hereby amended to read as follows:

Whereas the national defense requirements have created a shortage of Molasses, as hereinafter defined, for defense, for private account, and for export, and it is necessary in the public interest and to promote the defense of the United States, to conserve the supply and direct the distribution thereof:

*Now, therefore, it is hereby ordered,* That:

§ 1031.1 General Preference Order M-54—(a) *Definitions.* For the purposes of this Order:

(1) "Molasses" means any molasses, sirup, sugar solution, or any form of fermentative sugar (derived from sugar cane or sugar beets) other than direct-consumption sugar (as defined in General Preference Order No. M-55) or sugar intended for and used for manufacture into direct-consumption sugar. Blackstrap Molasses is any final Molasses produced in the manufacture of sugar from sugar cane or from the refining of raw sugar and includes all beet Molasses produced in the manufacture of sugar from sugar beets. Invert Molasses made from sugar cane without extraction of sugars. For the purpose of this Order one gallon of invert Molasses is to be construed as 1½ gallons of blackstrap Molasses.

(2) "Producer" means any person engaged in the production of Molasses and includes any person who has Molasses produced for him pursuant to toll agreement.

(3) "Importer" means any person who transports Molasses in any manner into the continental United States. Release from the bonded custody of the United States Bureau of Customs shall be deemed a transportation.

(4) "Distributor" means any person who sells Molasses of which he is not either the Producer or the Importer.

(5) "Class 1 Purchaser" means any person who requires Molasses in the Manufacture of any one or more of the following products:

(i) Yeast.
(ii) Citric acid.

331059

(iii) Molasses or Sirup for Human Consumption.
(iv) Insecticides, Lactic Acid or Graphite Paste.
(v) Sugar for Human Consumption (produced from beet molasses).
and any person who requires Molasses for dust extraction purposes or leather tanning.

(6) "Class 2 Purchaser" means any person who requires Molasses in the manufacture of feed (other than for the barrel trade).

(7) "Class 3 Purchaser" means any person who requires Molasses for foundry purposes.

(8) "Class 4 Purchaser" means any person who requires Molasses in the manufacture of vinegar.

(9) "Calendar Quarter" means the several three month periods of the year commencing January 1, April 1, July 1, and October 1.

(10) "Calendar Quarterly Supply" means a quantity of molasses not in excess of the quantity used by a Purchaser listed above during a corresponding Calendar Quarter in the 12 months' period ended June 30, 1941. Purchasers shall determine a Calendar Quarterly Supply with respect to each used specified in subparagraphs (a) (5) (6) (7) and (8) above. Quantity shall in all cases be computed on a blackstrap Molasses basis.

(11) "15 Day Supply" means a quantity of Molasses not in excess of one-twenty-fourth of the quantity used by a Purchaser listed above during the 12 months' period ended June 30, 1941. Purchasers shall determine a 15 Day Supply with respect to each use specified in subparagraphs (a) (5) (6) (7) and (8) above. Quantity shall in all cases be computed on a blackstrap Molasses basis.

(b) *Applicability of Priorities Regulation No. 1.* This Order and all transactions affected thereby are subject to the provisions of Priorities Regulation No. 1, as amended from time to time, except to the extent that any provisions hereof may be inconsistent therewith, in which case the provisions of this Order shall govern.

(c) *Restrictions on deliveries.* Anything in Priorities Regulation No. 1 to the contrary notwithstanding:

(1) No Class 1, Class 2, Class 3 or Class 4 Purchaser shall, during any calendar Quarter, accept deliveries of Molasses in excess of the quantity set forth below less any quantity in excess of a 15 day supply on hand on the first day of the Calendar Quarter in which delivery is to be made:

(i) Class 1 Purchaser—during any Calendar Quarter, 100% of a Calendar Quarterly Supply.

(ii) Class 2 Purchaser—during Calendar Quarter commencing January, 1942, 55% of a Calendar Quarterly Supply; during any Calendar Quarter thereafter, 50% of a Calendar Quarterly Supply.

(iii) Class 3 Purchaser—during any Calendar Quarter, 110% of a Calendar Quarterly Supply.

(iv) Class 4 Purchaser—during Calendar Quarter commencing January, 1942, 75% of a Calendar Quarterly Supply; during any Calendar Quarter thereafter, 70% of a Calendar Quarterly Supply.

(2) Prior to delivery of Molasses, within the limitations of subparagraph (c) (1) hereof, the prospective deliveree thereof shall submit to the deliveror a certificate in substantially the following form, properly filled out and manually signed by a duly authorized official:

The delivery of.....gallons of Molasses (blackstrap Molasses basis), in connection with which this certificate is furnished, will not be, taking into consideration Molasses received and to be received during this Calendar Quarter from all other sources and inventory on hand on the first day of this Calendar Quarter, in excess of.....per cent of a Calendar Quarterly Supply to which the undersigned as a Class.....Purchaser is entitled pursuant to General Preference Order No. M-54, with the terms of which Order the undersigned is familiar.

Dated.....

.....
(Name of Purchaser)

By.....
(Duly Authorized Official)

(3) Purchasers specified in paragraph (a) hereof may make application to the Director of Priorities for deliveries of Molasses in addition to those set forth in paragraph (c) hereof if they own, possess or control facilities for the storage of the same.

(4) No person shall knowingly deliver Molasses to any Class 1, 2, 3 or 4 Purchaser in violation of the terms of subparagraphs (c) (1) and (2) hereof.

(5) Producers, Distributors and Importers may, during any Calendar Quarter, make deliveries of Molasses to persons who require the same for ensilage or feed or for sale to persons who require the same for ensilage or feed (the barrel trade) provided such deliveries do not exceed in quantity (on blackstrap Molasses basis) the deliveries made by such Producers, Distributors and Importers, respectively, for such purposes during the corresponding Calendar Quarter of the 12 months' period ended June 30, 1941.

(6) After January 15, 1942, no person shall deliver, use or accept delivery of Molasses for the manufacture of beverage spirits.

(7) On and after January 1, 1942, except with respect to deliveries permitted by subparagraphs (c) (1) (2) and (5) hereof, deliveries originating and completed outside of the continental United States, deliveries to an Importer originating outside of the continental United States, deliveries to a Distributor (deliveries to a Distributor coming within the provisions of subparagraph (c) (5) hereof shall be governed by such subparagraph) and deliveries specifically authorized by the Director of Priorities, no deliveries of Molasses shall be made by any Producer, Distributor or Importer; and no person shall accept delivery of Molasses made in violation of the foregoing clause. At the beginning of each calendar month the Director of Priorities will issue to all Producers, Distributors and Importers specific directions covering deliveries of Molasses which may be made by such Producers, Distributors and Importers during such month. Such directions will be primarily to insure the satisfaction of all defense requirements and to provide an adequate supply for essential civilian uses, and they may be made at the discretion of the Director of Priorities without regard to any preference rating assigned to particular contracts or Orders.

(d) *Restrictions on consumption.* Unless otherwise authorized by the Director of Priorities, no Purchaser specified in paragraph (a) hereof shall, during any Calendar Quarter commencing with the month of January 1942, use or consume more Molasses than he would be permitted to receive during such Calen-

# SPECIAL NOTICE

**After a conference between General Raymond Fleming, Adjutant General of Louisiana, and Major J. Lester White, State Advisor on Occupational Deferment, the following memorandum is published for the information and guidance of the farmers and the local draft boards in the State of Louisiana by the *SUGAR BULLETIN*, official organ of the American Sugar Cane League:**

DEFERRED CLASSIFICATIONS FOR THOSE ENGAGED IN FARMING AND STOCK RAISING

1. Local Selective Service Boards have always been and are now ready and anxious to give careful consideration to requests for deferred classifications for those registrants engaged in farming and stock raising, provided the employers submit such requests in keeping and within the time limits as prescribed by the regulations.

2. Employers have ten days from the date of mailing of the questionnaire by the Local Board or, in the case of one previously deferred, ten days from the mailing of the card notification of reclassification by the Local Board to submit such requests and these must be on Selective Service Forms Nos. 42 and 42A which may be secured from any Local Board office.

3. Requests should be submitted only for such employees as are irreplaceable at the time because of their skill for the duties involved or because of a farm labor shortage in the area.

4. The Selective Service Act of 1940 prohibits group deferments and provides further that no deferment shall be granted to any registrant because he is in any occupational group. Each case must be decided on its own individual merits.

5. Deferments are merely delays, are granted only for such period of time as a Local Board deems necessary to train or secure a replacement and must not exceed, in any case, six months, subject however to renewal for an additional period if warranted.

6. If and when deferments are granted, the employer obligates himself to make *every* effort to train or secure a replacement within the deferment period granted. A renewal will be made only if the employer can *convince* the Local Board, through notarized documentary evidence, that he has made every possible effort to replace the registrant and without avail.

7. Should a Local Board decline to grant a deferment when request is submitted and place the registrant in Class 1-A, the employer may ask for an appeal if he does so within the first ten days following the date of mailing of the card notification, Form No. 57, to the registrant. No particular form is required but merely a letter addressed to the Local Board by the employer requesting an appeal of the Local Board's classification.

8. Boards may only grant deferments when satisfied that the registrant's immediate induction will, in all probability, cause a material loss in production of commodities in which shortages exist or are expected to exist in the near future.

9. Replacements should be secured from these groups ineligible to serve in the armed forces (1) because of over age, (2) from those within age but with physical impairments or (3) from the group not eligible for service in the armed forces because of dependents.

10. This nation is now at war, engaged in producing a large army and navy and every employer is expected to cooperate fully in the national war effort.

11. During the questioning of a registrant at State Headquarters recently, inquiry was made as to his father's nationality. "Farmer", the registrant promptly replied. "Darn good nationality if you ask me," replied the State Director.

dar Quarter (if he had no Molasses on hand) pursuant to the provisions of paragraph (c) hereof.

(e) *Intra-company transactions.* The prohibitions or restrictions contained in this Order with respect to deliveries shall, in the absence of a contrary direction, apply not only to deliveries to other persons, including affiliates and subsidiaries, but also to deliveries from one branch, division or section of a single enterprise to another branch, division or section of the same or any other enterprise owned or controlled by the same person.

(f) *Reports.* Reports shall be made at such times on such forms and with respect to such matters as shall be prescribed by the Chemicals Branch of the Office of Production Management. Persons who have stocks of Molasses on hand which they are forbidden by the terms of this Order to deliver or use shall forthwith report such fact (and the details thereof) in writing to said Chemicals Branch and shall hold the said stocks until further order of the Director of Priorities. In addition, Producers, Distributors and Importers shall forthwith report to said Chemicals Branch the storage facilities (and the location thereof) which they own, possess or control.

(g) *Notification of customers.* Producers, Distributors and Importers shall, as soon as practicable, notify each of their regular customers of the requirements of this Order, but the failure to give such notice shall not excuse any person from the obligation of complying with the terms of this Order.

(h) *Violations or false statements.* Any person who violates this Order or who wilfully falsifies any records which he is required to keep by the terms of this Order, or by the Director of Priorities, or otherwise wilfully furnishes false information to the Director of Priorities or to the Office of Production Management may be deprived of priorities assistance or may be prohibited by the Director of Priorities from obatining further deliveries of materials subject to allocation. The Director of Priorities may also take any other action deemed appropriate, including the making of a recommendation for prosecution under Section 35 (A) of the Criminal Code. (18 U.S.C. 80).

(i) *Appeals.* Any person affected by this Order who considers that compliance therewith would work an exceptional and unreasonable hardship upon him, or that it would result in a degree of unemployment which would be unreasonably disproportionate compared with the amount of Molasses conserved, or that compliance with this Order would disrupt or impair a program of conversion from nondefense to defense work, may appeal to the Office of Production Management, Reference: M-54, attention Chemicals Branch, setting forth the pertinent facts and the reason he considers he is entitled to relief. The Director of Priorities may thereupon take such action as he deems appropriate.

(j) *Effective date.* This Order shall take effect immediately and shall continue in effect until revoked by the Director of Priorities. (P.D. Reg. 1 Amended, Dec. 23, 1941, 6 F.R. 6680; O.P.M. Reg. 3 Amended, Sept. 2, 1941, 6 F.R. 4865; E.O. 8629, Jan. 7, 1941, 6 F.R. 191; E.O. 8875, Aug. 28, 1941, 6 F.R. 4483; sec. 2 (a), Public, No. 671, 76th Congress, Third Session, as amended by Public, No. 89, 77th Congress, First Session).

Issued this 23d day of January 1942.

J. S. KNOWLSON,
Acting Director of Priorities.

# Cryolite Controls Many Insects

*(C. O. Eddy)*

Intensive experiments by the Louisiana Agricultural Experiment Station and the Bureau of Entomology and Plant Quarantine of the United States Department of Agriculture have shown that cryolite is the most useful insecticide that has yet been discovered for the control of the sugar cane borer. Report on this work has appeared in a number of publications, and has been presented to the contact committee of the Sugar Cane League and to other groups of sugar cane workers. The purpose of this article is to acquaint the sugar cane growers with other uses of cryolite.

Sugar cane growers will find many cases where cryolite will be useful for the control of pests of field crops, garden crops, fruit crops, and ornamentals. If sugar cane growers adopt the use of cryolite for the control of a number of the insects on their plantations, many of which are annual pests, they will become familiar with the poison and means of applying it. If this is done, they can readily adapt it to the control of the sugar cane borer, if and when this insect becomes a major pest.

Sodium fluoride has been known as a most efficient insecticide for the control of cockroaches for many years. Sodium fluosilicate has been used for similar purposes. It has also been used with some degree of success to kill insects on plants resistant to poison, but has been discontinued now, not because it fails to kill a great many insects, but because it usually causes injury to plants. Barium fluosilicate, usually called Dutox, is another fluorine compound which is useful in controlling a number of truck crop pests. Cryolite is safer on plants than sodium fluosilicate.

There are a great many plants in Louisiana that are resistant to lead arsenate, calcium arsenate, or Paris green, which have pests that are readily killed by these poisons. On the other hand, there is a still larger group of plants that are injured or killed by these insecticides. During the past several years the Louisiana Agricultural Experiment Station has directed a portion of its research program to the finding of poisons that will kill the pests on these tender plants but will not injure the tender foliage or fruits. Investigations were directed to many kinds of arsenicals, fluorine compounds, and other chemicals. From these studies, it was found that cryolite is by far the most practical one to use. There are others that approach the toxicity for insects and a safeness on foliage, but they are unsatisfactory in one or more ways. These studies, which have now been continued over a period of about six years, have shown that cryolite should become a standard insecticide in Louisiana, just as has Paris green, lead arsenate, or calcium arsenate. With the addition of cryolite to this group, we have not only increased the range of plants on which insecticides for chewing insects can be used, but have increased many times, the number of chewing insects that can be controlled effectively.

Cryolite, chemically speaking, is sodium fluo-aluminate. It is secured from mines in Greenland, which are operated during the warm period of each year. This material is then processed and sold as an insecticide. This material when sold is usually called natural cryolite or kryocide. Cryolite is also manufactured in

the United States. This product is usually known as synthetic cryolite or Alorco cryolite. In the past there have been a number of imported cryolites and other fluorine compounds, but they are now very difficult or practically impossible to secure in Louisiana. Most of the experimental dusting with sugar cane has been done with the synthetic or Alorco cryolite. In experiments, however, there has been practically no significant difference in the toxicity of the two materials in the control of insects. It has been found, however, that the synthetic cryolite is a better dust when undiluted and that the natural cryolite does better when diluted with at least twenty parts, by weight, of some neutral material such as pyrax, clay, talc, or their admixtures with flour. Both of these materials may be used as sprays at the rate of three or four pounds per one hundred gallons of water. In practically all cases, however, it seems that the Louisiana growers prefer to use them both in the dust form.

Cryolite will control the velvet bean caterpillar (soy bean caterpillar) on soy beans effectively. One, or at the most two, applications used at about eight pounds per acre is usually adequate for commercial control. It is recommended generally now where soy beans are produced for seed. In fact it is practically impossible to produce seeds effectively and economically without utilizing this poison. It is not recommended for soy beans produced for forage because cryolite is a poison. Cryolite wll also control the bean leaf beetle, the banded diabrotica, and the grape colaspsis, a group of beetles that are sometimes more destructive to soy beans than the soybean caterpillar. The bean leaf beetle is also a pest on cow peas, garden beans, and other bean crops. It can be controlled on all of them by the use of cryolite. Both species of diabroticas also attack a number of vegetable crops such as cucumbers and beans, where they may be controlled by the use of the same poison.

All of the flea beetles are killed readily with moderate to light applications of cryolite applied either as a dust or as a spray. It is an excellent poison for the control of the melon worm and the pickle worm on cucumbers. In experiments at Baton Rouge it has given better control of the tomato fruit worm as a dust than either lead arsenate or calcium arsenate. It is also an effective poison in the control of the vegetable weevil, a slug-like caterpillar. It may be used effectively for the control of the cabbage worms on cabbage, cauliflower, and similar crops before the heads begin to form. After that time it is better to use a non-poisonous insecticide such as derris.

Cryolite will also control most of the small worms and beetles on ornamentals and floral plants, particularly if the worms are in the early stages of growth. A word of caution is necessary because many caterpillars or worms are not killed readily by any poison after they become fully grown.

It should not be inferred from this article that cryolite will kill all the insects that feed on foliage. It is not unsuccessful in the control of large June beetles or, in fact, any of the other large beetles. It will not control full grown grass worms. In most instances it has been successful in our experiments in the control of the Irish potato beetle. It has failed in the experiments at the Louisiana Agricultural Experiment Station in the control of cut worms and boll weevils. It has also failed to control the plum curculio on peaches. It has also caused injury to two plants: namely, peaches and corn. After reading the nature and type of insects that this insecticide will control and the list that it will not control, a grower should be able to judge pretty well whether it will be useful against other insects or not, if he is confronted by other insects that are not covered in this article.

Cryolite is a very desirable insecticide to use on plants where growers are attempting to keep away from alkaline materials. It is well known that many plants like camellias, azaleas, and sweet olives must be grown in a neutral or acid soil. For that reason, calcium arsenate is undesirable for leaf feeding insects. Cryolite, however, being a neutral may be used on all of these plants without fear of disturbing the reaction of the soil.

Experiments during the last year have been directed particularly to combinations in which fluorine compounds may be used successfully in either sprays or dusts. For instance, a number of the fluorine compounds are not compatible with basic copper sulphate nor with Bordeaux mixture. Experiments at Baton Rouge have shown that cryolite is not compatible with a number of the insoluble copper compounds, including such materials as Bordeaux mixture, but that it is compatible with a number of insoluble copper compounds such as basic copper sulphate and copper oxide. In general, cryolite and the other fluorine compounds can not be used successfully with fungicides or with diluents that contain lime or that are alkaline in nature.

One of the most promising fungicide and insecticide combinations is cryolite dust mixture No. 1, which is as follows:

Cryolite Dust Mixture No. 1

| | |
|---|---|
| 33% | Cryolite |
| 18% | Basic copper sulphate (7% metallic copper) |
| 10% | Flour |
| 39% | Clay or Talc |
| 100% | |

Cryolite Dust Mixture No. 1 has been used more or less practically on tomatoes for a number of years for the control of the tomato fruit worm. The fungicide was added control the diseases that are checked or controlled by the copper fungicide. It also allowed the plant to grow much more normally and produce better and larger fruit than the lead arsenate Bordeaux sprays which were in common use. The first mixture gave two or three times better control of the pickle worm than did the lead arsenate-Bordeaux sprays.

In the experiments on tomatoes during the last year, Cryolite Dust Mixture No. 2 has given somewhat better control of the tomato fruit worm than Cryolite Dust Mixture No. 1. Experiments and practical experiences during the next few years will probably show what the most profitable and most effective dust mixture will be on tomatoes.

Cryolite Dust Mixture No. 2

| | |
|---|---|
| 50% | Cryolite |
| 18% | Basic copper sulphate (7% metallic copper) |
| 32% | Inert diluent (Clay or Talc) |
| 100% | |

Cryolite also has been used successfully with sul-

phur, and with mixtures of insoluble copper fungicides and sulphur. The growers of ornamental plants, in particular, are finding that this combination of cryolite with basic copper sulphate and sulphur is useful. For instance, 33⅓ of cryolite can be mixed with the 90-10 sulphur-basic copper sulphate mixture in order to control the diseases and chewing insects of roses. In case sucking insects are a factor, Black Leaf 10 or derris may be added to this combination.

Many of these combinations will be made by a number of the insecticide mixing companies in Louisiana. Perhaps growers will prefer to buy these mixtures rather than make them themselves.

## Have You A Copy of the Sugar Bulletin of July 15th 1924?

A copy of the issue of the *Sugar Bulletin* of July 15th 1924 is earnestly desired by Mr. Reginald Dykers, Manager Emeritus of the American Sugar Cane League. That issue contains an obituary of Dr. William Carter Stubbs, written by Mr. Dykers, which he is very anxious to include in a scrap book he is preparing. Unfortunately no copy of the issue of July 15th 1924 has been preserved in the League office except one that is in a bound volume.

Mr. Dykers address is 414 Whitney Bldg.

## No Limitations

The United States Department of Agriculture issued a Press Release on Feb. 1st 1942 under the signature of Whitney Tharin, Chief of Press Service on "Information in 1942 Production Goals," arranged by classes of commodities. We quote the sugarcane sugar phase of that relation—

"Sugarcane—No limitations on plantings, No acreage restrictions; production up to processing capacity urged."

**FOR SALE**

GOLDEN RIDGE FACTORY INTACT

500 ton capacity, 6 foot mill; Corliss Engine; Mirlees-Watson Knives; Steel Carrier; Double Effects; 2 Vacuum Pans; Water Purification and Vacuum Pan Cooling Systems, Etc.

Contact Mr. H. M. Sevin,
Secretary-Treasurer,

WEBRE-STEIB CO., LTD.
Vacherie, La.

**PAUL, RICE & LEVY**
INCORPORATED

Wholesale
INDUSTRIAL, MILL & MARINE SUPPLIES

Day, Ra. 6123 Night, Fr. 2019

501-505 Poydras St.

New Orleans, - - La.

O I C VALVES
GUILD & GARRISON PUMPS
INTERNATIONAL INDUSTRIAL PAINTS
CHESTERTON PACKING
K-TING MANILA ROPE
CONSOL OILS
VULCAN SOOT BLOWERS

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

LAMBORN & COMPANY, INC.
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

LE BOURGEOIS BROKERAGE CO.
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
HARRY L. LAWS & CO., Inc.
Brokers and Distributors
SUGAR and MOLASSES
SUGAR FUTURES
American Bank Building New Orleans, La.

GAY, SULLIVAN & CO., INC.
SUGAR
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

STAUFFER, ESHLEMAN & CO., LTD.
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
CYANAMID
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

INDUSTRIAL LUBRICANTS

BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
STANDARD OIL CO. OF LA.

FOR SUGAR CANE FINANCING
STATE AGRICULTURAL CREDIT CORPORATION, INC.
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

AMERICAN MOLASSES CO.
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LEGardeur Frank Youngman
R. J. LEGARDEUR & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

PENICK & FORD, LTD., INCORPORATED
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

STANDARD SUPPLY AND HARDWARE CO., INC.
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

E. A. RAINOLD, INC.
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

Chemistry Library
Louisiana State University, La.

THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

We stand for the encouragement of Home Industries as against foreign Competition

Vol. 20 NEW ORLEANS, LA., MARCH 1, 1942 No. 11

# Democratic Processes in War-Time

*(By C. J. Bourg)*

Our sincere compliments and appreciation are hereby publicly expressed to the Honorable A. E. Bowman and his staff in the Sugar Section of the Food Supply Branch, War Production Board, for their well-received and encouraging demonstration of the "democratic processes" in connection with the allocation of raw sugar to refiners. The interested parties of the industry were first invited to attend a public hearing held in Washington on January 16th, at which time the cane refiners submitted a joint proposal that allotments be based on the best three out of the last five years, which would be satisfactory to a majority of the refiners; and they recommended that special consideration be given to individual cases where hardships might result from the formula. The WPB having later announced the allotments, all interested parties were invited to attend an informal meeting, at which Mr. Earl McHardy (who had worked out the proration) explained in detail how each allotment was arrived at and how special cases were handled. The results were generally acceptable, and each question raised was thoroughly and satisfactorily explained.

An interesting example is given to show the responsiveness of the WPB officials to the industry requests and to the individual problems of Louisiana refiners who produce their own raw sugar. One such refiner had requested that his right to refine his own raw sugar production should be respected, so that at no time would any individual company be forced to sell the raw sugar it produces to another refiner. The request was granted. Another refiner preferred to obtain raw sugars throughout the year and was willing to purchase offshore raws in the Spring and Summer months and to yield part of his raw sugar production during the Winter months. Obviously the purpose was to maintain a twelve-months' supply for distribution to regular customers. This apparent conflict was met by maintaining the right of any refiner to process his own raw sugars, but allowing any other refiner to submit a request for the substitution of offshore raws for part of his own raw sugar production.

Objection was made to a proposed definition of raw sugar which was different from the definition used in the Sugar Act and in M-55. After consultation, it was agreed to maintain uniformly the established definition. The only proposal of the industry which was rejected was one in connection with sugars for re-export, and a satisfactory explanation was given.

The WPB has appointed an advisory committee of the cane sugar refining industry to consult on matters of production and distribution. The WPB also has under consideration the appointment of a beet sugar advisory committee, and a sugarcane and raw sugar advisory committee from the Mainland Cane Area. Similar industry committees have been requested under Section 2 of the Emergency Price Control Act for appointment by the Honorable Leon Henderson, Price Administrator.

### Tire and Automobile Rationing

The problem of securing tires for tractors and farm implements is being followed up very actively by the American Sugar Cane League with all Government agencies. The Office of Agricultural Defense Relations has helped to obtain recognition of the need for this equipment in the increased production of sugar. The divisions of the WPB and OPA have been working out the tire problems from the standpoint of production, stocks, and rationing.

In a letter addressed to Senator Ellender, the Chief of the Transportation and Farm Equipment Branch, WPB, takes cognizance of the special needs of our industry and states that manufacturers of tractors and rubber tires have been notified to give preference on high-profile tires to the sugarcane growers. He writes:

> "As you are undoubtedly aware, hostilities in the Far East threaten to deprive this country of its main source of crude rubber. It has therefore become

THE
SUGAR BULLETIN
414 Whitney Bldg., New Orleans
Marcel J. Voorhies, Editor
Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
Subscription Price, 50 Cents per Year.

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE
**President, W. C. Kemper, Franklin, La.**
1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

**EXECUTIVE COMMITTEE**
W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

necessary that every effort be made to conserve the available supply for ultimate defense use. Manufacturers, who have heretofore used rubber in the production of their articles, have been urged to eliminate rubber by redesign, respecification, or by substitution of steel wheels if at all practical. The urgency of the rubber situation requires the elimination of the use of rubber in civilian commodities wherever it is possible to do so.

"The Department of Agriculture over a month ago called this matter to our attention and we in turn urged the tractor builders and the rubber companies to conserve their stock of high profile tires for the sugarcane growers. The high lugs are necessary because of the soil conditions with which you are familiar and the newer agricultural tires using more reclaimed rubber are unsuited for this service."

From the above, it will be seen that the individual grower of sugarcane in Louisiana can now look to his local dealer and his local tire rationing board for relief, to the extent of existing stocks. A committee of the American Sugar Cane League is working on this matter in Louisiana from the standpoint of the industry as a whole. This committee will keep in close contact with the situation, so that if there should be any need for further action in Washington, your Washingon Representative will follow through.

In connection with tire rationing, the following interpretations have been summarized for your information:

*Definition.* The definition of tires given in the Regulations includes tires used on earth movers, excavators and roadgraders, even though such tires are used partly or wholly in non-highway service. The Regulations exempt only wheelbarrow tires and solid, cushion, or pneumatic tires of the type commonly designated as industrial tires which are not capable of use on an automobile, bus, motorcycle, highway truck or farm implement.

*Tractor and trailer combination.* A tractor and trailer combination is treated as two vehicles within the provision of the Regulations restricting spares to one for each vehicle.

*Farm trucks.* Trucks used exclusively for general farm work and for the hauling of grain, hay and straw to market are eligible for new tires.

In connection with new passenger automobiles, the rationing regulations provide an eligible classification, which includes the following two:

"Executives, engineers, technicians, and workers, requiring automobiles for transportation to and from, or within, factories, power plants, transportation or communciation facilities, *farms*, lumber camps, mines, military or naval establishments, or similar places of employment when the work done at such places of employment is essential, directly or indirectly, to the prosecution of the war.

"Persons requiring automobiles for the transportation of produce and supplies to and from a *farm* if the applicant does not own or possess a truck or other practicable means of transportation."

### Sugar Price Ceilings

Under the terms of the Emergency Price Control Act, the Office of Price Administration has republished all price schedules previously issued, including Price Schedule 16 covering raw sugar and Price Schedule 60 covering direct-consumption sugar, both as amended. In announcing the reprinting of the Schedules, the Office of Price Administration declared:

"Under the terms of the Price Control Act, a statement of consideration must be filed with each new price regulation. Protest may be filed against provisions of any maximum price regulations under the statute within 60 days after issuance of the regulation on grounds existing at that time, or within 60 days from the time that grounds arise to cause such protest.

"Maximum prices under the 60 day temporary regulations must be based on the prices prevailing during the five days prior to their issuance. They must be replaced by permanent ceilings if they are to remain in effect after the 60 days have elapsed."

In summarizing the principal provisions of the Act, the Price Administrator issued the following statement with regard to the control of prices of agricultural commodities:

"Special limitations have been imposed upon the Administrator's powers with respect to agricultural commodities. The Administrator's power to establish prices for agricultural commodities cannot be exercised until the price of such agricultural commodities has reached the highest of the following prices: (1) 110 percent of the parity price (or comparable price in certain cases) of such commodity; (2) the market price prevailing for such commodity on October 1, 1941; (3) the market price prevailing for such commodity on December 15, 1941; or (4) the average price for such commodity during the period July 1, 1919 to June 30, 1929. The prices of derivative commodities, that is, those processed in whole or substantial part from any agri-

cultural commodity must also be sufficiently high to return to the producer of the primary commodity a price equal to the highest of the enumerated prices. No price for an agricultural commodity may be fixed in any event without the prior approval of the Secretary of Agriculture."

An official determination is being sought by the domestic sugar industry with regard to the parity price of sugarcane and of sugar beets; also the price of sugarcane and of sugar beets in the period July 1919 to June 1929. Likewise. an official determination is being sought as to the price of raw sugar which will bring about a return to the sugarcane grower amounting to 110% of parity, or the average price for sugarcane during the 10-year period 1919-1929.

**Agricultural Labor and Occupational Deferment**

A press release from the national headquarters of the Selective Service System covers the question of deferments which so vitally affect all persons employed in the production of sugar in Louisiana. The Secretary of Agriculture having appealed for the increased production of sugar in the United States, the War Production Board and other agencies have recognized that sugar is an essential product in the national defense by the issuance of regulations as to local sugar shortages, the equitable distribution of sugar to wholesalers and manufacturers, the elimination of hoards, and plans have been announced for rationing. As the release covers the subject thoroughly and includes references to all persons employed in field and factory for the production of essential foods, it is reproduced in full:

Completion of a program for cooperation between the Selective Service System and the Department of Agriculture to maintain agricultural production essential to the nation's war status, was announced on February 17th by Brig. Gen. Lewis D. Hershey, Director of Selective Service. Under these arrangements, the General stated, the Agriculture Department will make available to Selective Service local boards data concerning the farm labor situation in their respective areas.

All local boards should consider carefully all individual claims for deferment as a "necessary man" in agriculture, because of the increasing shortage in this field, General Hershey said in announcing that he and Secretary of Agriculture Wickard have completed arrangements whereby Selective Service units may be assured of prompt and full information from County War Boards of the Department of Agriculture with regard to farm conditions.

The assistance of the County War Boards will be limited to providing information and will not extend to requests for deferment or consideration of the cases of individual registrants, Secretary Wickard and General Hershey have agreed. Classification remains the duty and responsibility of the Selective Service Local Board, the General asserted, and he pointed out that each claim for deferment must be handled by local boards on individual merit .

Confirming their agreement, General Hershey in a letter to Secretary Wickard said:

"The increasing pressure for manpower to supply the war production program and the armed forces prompts me to seek your cooperation in announcing a policy and establishing means for more adequately protecting that part of the war production program which is represented by agriculture.

"To the extent that we have been able, the Selective Service System has continually called the attention of its agencies to the importance of deferring key men in agriculture. As the drain upon the nation's manpower has increased, I have felt the need of taking additional steps in this direction."

To take "additional steps," the General suggested that the County War Boards of the Department of Agriculture be requested to cooperate with Selective Service local boards by furnishing information. He said:

"In our meeting with your representatives and those of the national farm organizations, attention was called to the County War Boards as the media through which we might accomplish cooperation. This proposal appeals to me. If you agree, I suggest that you direct these boards to make available to Selective Service local boards upon their request, general information helpful in the accomplishment of proper classification of men engaged in agriculture.

"The assistance of the War Boards would be purely in the nature of providing information and would not extend to requests for deferment or consideration of the cases of individual registrants. Classification is the duty solely of the local boards."

General Hershey said that reports reaching National Selective Service Headquarters indicate that the demand for industrial production manpower, in some portions of the country, has resulted in a serious depletion of the number of men necessary to the maintenance of essential agricultural activities. In order to insure the maintenance of essential agricultural activities, he said, local boards will be asked to give full importance to the consideration of claims for deferment of men engaged in agriculture. Such consideration, he declared, should include thorough analysis of the status of each man with respect to his agricultural employment and should be based upon full information regarding those agricultural products which are essential.

He said:

"This Headquarters is taking steps which it is believed will assist the local boards to obtain adequate information upon which to base the classification of registrants engaged in agricultural pursuits. To this end, conferences have been held by representatives of the Selective Service System and the Department of Agriculture which have resulted in arrangements to provide information to Selective Service agencies on the national, state and local levels. Arrangements have also been made to inform all agricultural employers of the importance of limiting requests for occupational deferment to those cases where men are clearly necessary to the production of essential products and cannot be replaced at the time of classification.

"The Secretary of Agriculture has been requested, and has agreed to direct the State and County War Boards to make information available upon the request of the Selective Service agencies. These County War Boards will be directed not to interest themselves in individual cases, but to be prepared to assist Selective Service local boards should they make inquiries concerning the importance of certain products and the scarcity of men qualified to produce them. It is the desire of this Headquarters that state headquarters, appeal boards, local boards and appeal agents avail themselves of the opportunity provided by the Department of Agriculture.

General Hershey also said that the Secretary of Agriculture had offered to cooperate with National Headquarters by informing the Director of Selective Service from time to time, regarding those agricultural activities which are essential. This information will be relayed to State Directors and local board, the General asserted.

## 1942 Wage Rates

*Determination of Fair and Reasonable Wage Rates for Persons Employed in the Production and Cultivation of Sugarcane in The Mainland Cane Sugar Area During the Calendar year 1942.*

Whereas section 301 (b) of the Sugar Act of 1937, as amended, provides the following as one of the conditions for payment to producers of sugar beets and sugarcane:

"(b) That all persons employed on the farm in the production, cultivation, or harvesting of sugar beets or sugarcane with respect to which an application for payment is made shall have been paid in full for all such work, and shall have been paid wages therefor at rates not less than those that may be determined by the Secretary to be fair and reasonable after investigation and due notice and opportunity for public hearing; and in making such determinations the Secretary shall take into consideration the standards therefor formerly established by him under the Agricultural Adjustment Act, as amended, and the differences in conditions among various producing areas: Provided, however, That a payment which would be payable except for the foregoing provisions of this subsection may be made, as the Secretary may determine, in such manner that the laborer will receive an amount, insofar as such payment will suffice, equal to the amount of the accrued unpaid wages for such work, and that the producer will receive the remainder, if any, of such payment."

And whereas the Secretary of Agriculture has held a number of public hearings in the mainland cane sugar area for the purpose of receiving evidence likely to be of assistance to him in determining fair and reasonable wage rates for persons employed in the production and cultivation of sugarcane during the period from January 1, 1942 to December 31, 1942.

Now, therefore, I, Grover B. Hill, Assistant Secretary of Agriculture, after investigation and due consideration of the evidence obtained at the aforesaid hearing and all other information before me, do hereby determine that:

802. 24i Fair and reasonable wage rates for persons employed in the production and cultivation of sugarcane in the mainland cane sugar area during the calendar year 1942. The requirements of section 301 (b) of the Sugar Act of 1937, as amended, shall be deemed to have been met with respect to the production and cultivation of sugarcane in the mainland cane sugar area during the period from January 1, 1942 to December 31, 1942, if all persons employed on the farm during that period in the production and cultivation of sugarcane shall have been paid in full for all such work and shall have been paid wages in cash therefor at rates not less than the following:

(a) Louisiana. (1) Tractor drivers: Not less than $1.90 per 9-hour day or 21.5 cents per hour.

(2) Teamsters: Not less than $1.50 per 9-hour day or 17 cents per hour.

(3) All other adults engaged in the production and cultivation of sugarcane (excluding harvesting): Adult male workers, not less than $1.50 per 9-hour day or 17 cents per hour; adult female workers not less than $1.25 per 9-hour day or 14 cents per hour.

(4) Children between the ages of 14 and 16 years: not less than $1.15 per day of 8 hours (maximum hours per day for such children). For a working day shorter than 8 hours, the rate shall be not less than 14.5 cents per hour.

(b) Florida. (1) Tractor drivers: Not less than $2.25 per 9-hour day or 25 cents per hour.

(2) All other adults engaged in the production of sugarcane (excluding harvesting): Adult male workers not less than $2.00 per 9-hour day or 22.5 cents per hour; adult female workers not less than $1.64 per 9-hour day or 18.5 cents per hour.

(3) Children between the ages of 14 and 16 years: Not less than $1.50 per day of 8 hours (maximum hours per day for such children). For a working day shorter than 8 hours, the rate shall be not less than 19 cents per hour.

(c) Provisos. Provided, however, (1) That if work is performed on any piece rate basis the earnings per hour or per day shall not be less than the applicable rates per hour or per day specified above for adult male workers or adult female workers, or children between the ages of 14 and 16 years;

(2) That for a working day longer or shorter than 9 hours, the applicable time rate for a particular operation shall be the hourly rate specified above for such operation;

(3) That the producer shall furnish to the laborer, without charge, the customary perquisites, such as, a habitable house, a suitable garden plot with facilities for its cultivation, pasturage for livestock, medical attention, and similar incidentals;

(4) That the producer shall not, through any subterfuge or device whatsoever, reduce the wage rates to laborers below those determined above; and

(5) That nothing in this determination shall be construed to mean that a producer may qualify for a payment under the act who has not paid in full the amount agreed upon between the producer and laborers.

Done at Washington, D. C., this 16th day of February 1942. Witness my hand and seal of the Department of Agriculture.

Grover B. Hill,
Assistant Secretary of Agriculture

## General Preference Order No. M-98

### To Conserve the Supply and Direct the Distribution of Raw Sugar

WHEREAS, it appears that the fulfillment of requirements for the defense of the United States will result in a shortage in the supply of raw sugar for the combined needs of defense, private account and export, and it is necessary in the public interest and to promote the defense of the United States to conserve the supply and direct the distribution of raw sugar:

NOW, THEREFORE, IT IS HEREBY ORDERED THAT: 1105. General Preference Order No. M-98

(a) *Applicability of Priorities Regulation No. 1.*

This Order and all transactions affected thereby are subject to the provisions of Priorities Regulation No. 1 (Part 944), as amended from time to time, except to the extent that any provision hereof may be inconsistent therewith, in which case the provisions of this Order shall govern.

(b) *Definitions for the Purposes of this Order.*

(1) "Person" means any individual, partnership, association, business trust, corporation, governmental corporation or agency, or any organized group of persons, whether incorporated or not.

(2) "Raw Sugar" means any grade or type of saccharine products derived from sugar cane which is in crystalline form and which polarizes 98.5 degrees or less, and any saccharine product of sugar cane in liquid form which is produced outside the continental United States and which contains non-sugar solids (excluding any foreign substance which may have been added) equal to 6 percentum or less of the total soluble solids.

(3) "Refiner" means any person in the continental United States who was engaged in the refining of Raw Sugar during the calendar year 1941.

(4) "Manufacturer" means any person in the continental United States who in 1941 bought or accepted Delivery from any source of Raw Sugar to use it in the manufacture of any product for human consumption, other than Direct-Consumption Sugar.

(5) "Delivery" means as follows:

(i) For Raw Sugar from foreign countries, arrival at a port of entry in the continental United States under customs' control.

(ii) For Raw Sugar from insular domestic areas, receipt at a port of entry in the continental United States.

(iii) For Raw Sugar produced in the continental United States, delivery as defined in the administration of the Sugar Act of 1937.

(c) *Restrictions on Refiners and Manufacturers.* Unless specifically authorized by the Director of Industry Operations;

(1) No person other than a Refiner or a Manufacturer, or the agent of a Refiner or a Manufacturer, shall purchase, import, or accept delivery of Raw Sugar during the calendar year 1942.

(2) No Refiner shall purchase, import, or accept Delivery of Raw Sugar during the calendar year 1942, in excess of any allotment which may be established from time to time for such Refiner by the Director of Industry Operations nor in violation of any order or regulation which may from time to time be prescribed by the Director of Industry Operations.

(3) No Manufacturer shall import or accept Delivery of Raw Sugar except in accordance with the provisions of General Preference Order No. M-55 as amended,

(d) *Records.* Each person participating in any transaction to which this Order applies shall keep and preserve for a period of not less than two years accurate and complete records of his inventories of the Material or Materials to which such Order relates and of the details of all transactions in such Materials. Such records shall include the dates of all contracts or purchase orders accepted, the delivery dates specified in such contracts or purchase orders, and in any preference rating certificates accompanying them, the dates of actual deliveries thereunder, description of the Material covered by such contracts or purchase orders, description of deliveries by classes, types, quantities, weights and values, the parties involved in each transaction, the preference ratings, if any, assigned to deliveries under such contracts or purchase orders, details of Defense Orders and all other rated orders either accepted or offered and rejected, and other pertinent information.

(e) *Reports.*

(1) Each Person participating in any transaction to which this Order applies shall execute and file with the War Production Board such reports and questionnaires as the War Production Board shall from time to time prescribe.

(2) Each Refiner accepting Delivery of Raw Sugar during the calendar year 1942 shall report to the War Production Board the information on the forms now required in the administration of the quota provisions of the Sugar Act of 1937, by filing such forms with the Sugar Division of the Department of Agriculture as agent of the War Production Board.

---

## Supplementary Order No. 98-A

(a) Pursuant to Paragraph (c) of General Preference Order No. M-98 no Refiner shall purchase, import, or accept Delivery of Raw Sugar produced in areas outside the continental United States in excess of the allotment hereby established for the period from January 1, 1942, to September 30, 1942, for him in the amount set forth below opposite his name. Such allotment may be changed or modified from time to time by the Director of Industry Operations. All such Raw Sugar purchased, imported, or received by him between January 1, 1942 and the date of this Order shall be charged against such allotment.

| | (short tons, raw value) |
|---|---|
| American Sugar Refining Company | 688,723 |
| J. Aron & Company, Inc. | 23,992 |
| California & Hawaiian Sugar Refining Corp: | |
| West Coast | 291,806 |
| East Coast | 98,501 |
| Colonial Sugars, Inc. | 87,783 |
| Godchaux Sugars, Inc. | 106,415 |
| Henderson Sugar Refinery, Inc. | 49,925 |
| Imperial Sugar Company | 79,946 |
| W. J. McGahan Sugar Refining & Molasses Co. | 121,982 |
| National Sugar Refining Company | 441,437 |
| Pennsylvania Sugar Company | 158,848 |
| Refined Syrups & Sugars, Inc. | 77,356 |
| Revere Sugar Refinery | 115,862 |
| Savannah Sugar Refining Corp. | 46,880 |
| South Coast Corporation | 5,906 |
| Sterling Sugars, Inc. | 13,995 |
| Sucrest Corporation and Affiliates | 62,490 |
| Western Sugar Refinery: | |
| West Coast | 69,836 |
| East Coast | 45,231 |
| Tea Garden Products Co. | 454 |

(b) Purchases, importations, or acceptances of Delivery, within the allotment established in Paragraph (a) hereof, of Raw Sugar produced in any areas outside the continental United States (except the Territory of Hawaii) shall be made only upon the specific authorization of the Director of Industry Operations.

(c) This order shall take effect immediately.

(P.D. Reg. 1 Amended, Dec. 23, 1941, 6 F.R. 6680; W.P.B. Reg. 1, Jan. 26, 1942, 7 F.R. 561, E.O. 9024, Jan. 16, 1942, 7 F.R. 329; E.O. 9040,

Jan. 24, 1942, 7 F.R. 527; sec. 2(a), Public No. 671, 76th Congress, Third Session, as amended by Public No. 89, 77th Congress, First Session.)

Issued this 14th day of February, 1942.

(f) *Appeal.* Any Person affected by this Order who considers that compliance herewith would work an exceptional and unreasonable hardship upon him, may apply for relief to the War Production Board by telegram or letter, setting forth the pertinent facts and the reason such person considers that he is entitled to relief.

(g) *Violations.* Any person who wilfully violates any provisions of this Order or who by any act or omission falsifies records to be kept or information to be furnnshed pursuant to this Order, may be prohibited from receiving further deliveries of any Material subject to allocation, and such further action may be taken as is deemed appropriate, including a recommendation for prosecution under Section 35A of the Criminal Code (18 U.S.C. 80).

(h) *Communications.* Appeals and other communications concerning this Order, with the exception of the reports referred to in paragraph C-4 hereof, should be addressed to:

"War Production Board
Washington, D. C. Ref: M-98"

(i) *Effective Date and Termination.* This Order will be effective until December 31, 1942 unless revoked, amended or modified prior thereto.

(P.D. Reg. 1 Amended, Dec. 23, 1941, 6 F.R. 6680; W.P.B. Reg. 1, Jan. 26, 1942, 7 F.R. 561; E.O. 9024, Jan. 16, 1942, 7 F.R. 329; E.O. 9040, Jan. 24, 1942, 7 F.R. 527; sec. 2(a), Public No. 671, 76th Congress, Third Session, as amended by Public No. 89, 77th Congress, First Session.)

Issued this 14th day of February, 1942.

(Sgd.) J. S. Knowlson
Director of Industry Operations.

# Red Rot and the Deterioration of Co. 290 Seed Cane

(*By I. L. Forbes, Department of Plant Pathology, Louisiana Agricultural Experiment Station*)

During the winter of 1940-1941 many reports in regard to the deterioration of the planted seed cane and stubble pieces of the variety Co. 290 were received by the Agricultural Experiment Station at Baton Rouge. The trouble, which many of the growers called "dry rot," was so noticeable and severe, especially in areas along Bayou Teche, that some of the planters were of the opinion that the variety Co. 290 was deteriorating in a manner similar to the deterioration of the old Noble canes during an earlier period. In the spring of 1941 germination of the seed cane was so poor in some fields that satisfactory stands were not obtained.

In December 1940 a survey of areas from which reports had been received revealed the fact that the trouble was largely confined to sections where the seed cane had been planted in very dry soil and where no appreciable amount of rain fell for several weeks after planting. The seed pieces when split and examined were found to be badly discolored. Of the varieties examined, Co. 290 was the most severely injured, but C.P. 29-320 was also injured to some extent. C.P. 29-116 showed very little injury.

Later in the winter, after the soil had been thoroughly saturated by rain, the discolored stalks rotted. When examined in late winter they were found to be soft and watersoaked.

The reason for the so-called "dry rot" of Co. 290 was at the time not perfectly clear, though Dr. C. W. Edgerton suggested that it might be due to red rot. Co. 290 has in recent years shown an increasing susceptibility to red rot and the disease often becomes severe in this variety when the cane is subjected to adverse conditions. Attempts to isolate the red rot organism from the rotted stalks during the winter were generally unsuccessful. This, however, was not very surprising, as it is known that the fungus dies out in old infections and it is usually difficult to isolate the organism from badly decayed stalks.

To determine whether the red rot disease was involved in the so-called "dry rot" problem, in the fall of 1941 experiments were conducted in the greenhouse where it was possible to keep the soil dry and thus have conditions more or less similar to those that occurred in the field during the preceding fall.

The first experiment was started September 9, 1941. Soil from the Sugar Station was placed on a bench in the greenhouse to a depth of about 10 inches. This was dried out for several days before the cane was planted. Thirty stalks of Co. 290, 20 stalks of Co. 281, and 20 stalks of C.P. 29-116 (in bundles of 5) were planted in the dry soil. As checks, 10 stalks of each variety were planted in the field. The seed cane was all taken from the same field and was planted with leaves on, as is done in commercial field planting. The soil was left dry throughout the test. After 48 days the cane was taken up and examined. At that time there was a general breakdown in many nodes and internodes of the Co. 290 cane from the dry soil, with definite red lesions in about one-half or more of the joints. The rot was more prevalent in the joints toward the top in some stalks and those at the base of others. There was an abundance of dark mycelium in the pith cavity of diseased internodes. Most germinated eyes were dead. In the Co. 290 checks planted in the field, at least one-third of the eyes had germinated and the shoots were a foot or more high. There were many roots at the nodes of seed pieces and on new shoots. There was some red rot in about one-half of all joints. In contrast to the Co. 290 cane, the Co. 281 stalks planted in dry soil were remarkably well preserved. Some shoots were up but most of the eyes, although sound, were not swollen. There was no definite red rot in any of the stalks. Seed cane of this variety is comparatively resistant to red rot and apparently to drying also. The C.P. 29-116 stalks were badly dried out but there was little if any red rot. A rather high percentage of eyes had germinated but many of the young shoots were dead from drought.

A second experiment was started October 27, 1941. Cane was planted in the greenhouse in the same soil used for the first experiment. Forty stalks of Co. 281 and 40 stalks of Co. 290 were cut from plant cane. There were numerous red rot infections on midribs of leaves and there were numerous borer holes in stalks. Twenty stalks of each variety (with leaves on) were treated in water at 52° C. for 20 minutes. Sixteen stalks of each variety treated and 16 not treated were planted in dry soil in the greenhouse. Four stalks of each variety treated and 4 not treated were planted as checks in the field. After 34 days the cane was taken up and examined. In the untreated Co. 290 stalks in dry soil severe red rot was present in 2 to 6 joints from top down.

There was also some red rot in a few basal joints. In the hot-water-treated Co. 290 planted in dry soil the red rot was more extensive and more severe than in non-treated stalks. There was very little red rot in any of the stalks planted in the field.

In a few of the treated and untreated stalks of Co. 281 there was also red rot in some nodes and internodes. There was very little red rot in the field planted cane of this variety.

In both varieties red rot seemed to have entered the stalks through borer punctures, cut ends of stalks, and possibly at the nodes. In a few stalks of Co. 290 infection was traceable directly to growth cracks in internodal tissues.

The similarity of the deterioration of the Co. 290 seed cane in the greenhouse tests to that which occurred in the field suggests that the trouble with Co. 290 was probably due to an infection of red rot made more severe than usual by the dry condition of the soil.

## Mr. Voorhies Goes to Washington

Mr. Marcel J. Voorhies, General Manager of the American Sugar Cane League, left New Orleans on February 26th for Washington, to confer with the officials of the U. S. Department of Agriculture regarding the Louisiana sorghum program. Mr. Voorhies said before he left that he hoped to settle all the details of the sorghum program by the first week in March. With the work of securing seed, contracting with the farmers, providing fertilizer and all other necessary details of the program completed, it will be possible for actual planting to begin during the first week in April, as per the original schedule.

## Fertilizer War Notes No. 1

*Compiled by The National Fertilizer Association Washington, D. C.*

The War Production Board started *rationing nitrate of soda* in January on a month-by-month basis. The officials in charge of the rationing determine directly how much is available for distribution each month for all purposes, including war purposes, but they depend upon other Government offices to tell them the needs for munitions, meat curing, agriculture, and other essential industries.

The needs of agriculture are determined by a committee appointed by the Secretary of Agriculture. This committee consists of 16 members, each of whom is an authority on some phase of fertilizer use or crop production. Each month, after considering all available information and statistics on the use of nitrate of soda in previous years and the magnitude of crops as set forth in the Department's 1942 production goals, the committee will determine the minimum requirements for the following month for each crop in each State, and the War Production Board will be advised accordingly.

Nitrate released in February in South Carolina for oats, for example, should be used in February for oats and not be saved for cotton or permitted to get into the hands of a farmer who will not need it until May or June. Farmers must remember that sizable stocks are on hand in the United States and additional supplies are coming in from Chile. It is important that we do not get unnecessarily concerned, because equitable allocations will be made for the cotton farmers and the corn farmers when the proper time comes.

It seems assured that supplies of mixed fertilizers, phosphates, and potash salts will be as large this spring as last. Nitrate of soda, which is used principally for side-dressing, is somewhat short, but it is almost certain that at least 50 per cent of the normal supply will be available and possibly enough may be brought in to make up a 90 per cent supply before the season is over.

In February, approximately the same quantities were allocated for agriculture as were actually applied to the soil in the same month of the previous year. Of course, this was less than the total distributed in February, 1941, because normally supplies are shipped to local dealers a month or so before they will be needed. When you are short you cannot ship in advance of needs.

**FOR SALE**

**GOLDEN RIDGE FACTORY INTACT**

**500 ton capacity, 6 foot mill; Corliss Engine; Mirlees-Watson Knives; Steel Carrier; Double Effects; 2 Vacuum Pans; Water Purification and Vacuum Pan Cooling Systems, Etc.**

**Contact Mr. H. M. Sevin,**
Secretary-Treasurer,

**WEBRE-STEIB CO., LTD.**
**Vacherie, La.**

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

LAMBORN & COMPANY, INC.
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

LE BOURGEOIS BROKERAGE CO.
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
HARRY L. LAWS & CO., Inc.
Brokers and Distributors
SUGAR and MOLASSES
SUGAR FUTURES
American Bank Building New Orleans, La.

GAY, SULLIVAN & CO., INC.
SUGAR
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

STAUFFER, ESHLEMAN & CO., LTD.
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline
Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
CYANAMID
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

FOR SUGAR CANE FINANCING
STATE AGRICULTURAL CREDIT CORPORATION, INC.
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

AMERICAN MOLASSES CO.
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LEGardeur Frank Youngman
R. J. LEGARDEUR & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

PENICK & FORD, LTD., INCORPORATED
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

STANDARD SUPPLY AND
HARDWARE CO., INC.
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

E. A. RAINOLD, INC.
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

State University. La.

We stand for the encouragement of Home Industries as against foreign Competition

Vol. 20 NEW ORLEANS, LA., MARCH 15, 1942 No. 12

# Let Us Be Mindful of What Is Happening!

*(By C. J. Bourg)*

Gradually and inexorably the cold hard facts demonstrate by their impact upon the consumers of sugar that the maintenance and expansion of the domestic production of sugar is the only absolute safeguard which can be counted upon under all circumstances to protect the consumers with respect to adequate supplies and a fair price. There is an expression that, at times, "people can't see the forest for the trees." It is the business of the American Sugar Cane League to point out to the American public and to the Members of Congress and to the officials of the Federal Government what the current happenings during the present war emergency mean to the consumer and to the domestic industry in terms of our national policies. It should be effectual in interpreting the meaning of current events to use a recent example. The American Sugar Cane League and other domestic organizations have warned against continuation of the policy of domestic sugar curtailment, for the reason that eventually the influence of war-times would be visited upon us with all of their restraints and limitations. Our warnings about potential shortages in 1942 were decried, and attempts were made to expose the domestic industry to public scorn. Today the facts are upon us, and the shortages are real. Significantly enough, the shortages are local and along the eastern seaboard States, which depend upon foreign sugars and ocean shipping for all of their supplies. There is plenty of sugar in the West, where beet sugar is produced; there is no comparable shortage in the southern part of the Mississippi Valley, where cane sugar is produced.

We point out these facts because they are the "trees" which local consumers see; and, in so pointing out, we appeal to the American consumers to look likewise at the forest which pictures clearly that restriction of domestic production has been a contributing cause of the consumers' plight, and, if we are to profit by experience, the United States must adopt more generous policies of encouragement towards the production of sugar within the States of the Union, in peace-times as well as in war-times.

In the Federal Register of February 21, 1942, we find the following statement:

> "The Office of Price Administration is charged with the maintenance of price stability and the prevention of undue price rises and price dislocations. I find that the supplies of sugar are ample; in fact, they exceed those supplies which were required to satisfy consumption last year and are sufficient this year to provide consumers with the highest per capita consumption on record. The current sharp upswing prices is detrimental to the public interest and national defense, and will, if not stopped, cause serious dislocations."

Reading the above at this time is shocking and unbelievable, in view of the facts. For instance, it is common knowledge, discussed in the public press, that the program for rationing sugar has been postponed because the local shortages of sugar in the eastern part of the United States have rendered it practically impossible to build up a sufficient supply of sugar in each retail store to furnish to each consumer the sugar represented by rationing tickets, limited to less than a pound per week per person.

Therefore, let us explain that the above-quoted paragraph is a reprint of an Order issued August 13, 1941, by which a ceiling was placed on raw cane sugars. Under the provisions of the Emergency Price Control Act, it was necessary for the Price Administrator to reprint in the Federal Register the price schedules issued prior to the enactment of the law. We invite attention to this incident, because it reveals most impressively the uncertainties and inhibitions which war-times bring about as the result of a national policy which fails to encourage expansion of sugar production within the United States. The old adage is, "In times of peace, prepare for war,"

THE SUGAR BULLETIN

414 Whitney Bldg., New Orleans

Marcel J. Voorhies, Editor

Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
Subscription Price, 50 Cents per Year.

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE

**President, W. C. Kemper, Franklin, La.**

1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

**EXECUTIVE COMMITTEE**

W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

and we suggest that in times of war we prepare for war and for the peace that is to come.

***

It is with great satisfaction and an element of encouragement that we submit for all sugarcane growers to read the letter written by Secretary Wickard to Senator Byrd of Virginia, in connection with the appropriation for conditional payments under the Sugar Act. We know that letters discussing and explaining a commodity program are always prepared originally by the commodity division; therefore, we assume that credit may appropriately be given to the Sugar Division, AAA, for the complete statement of justification for payments to sugarcane and sugar beet growers. From our standpoint, this letter is one of the most friendly and helpful messages issued by the Department of Agriculture in the several years of sugar control. It is the type of letter which properly comes from the Department of Government charged with a program intended to protect the welfare of all persons engaged in the sugar-producing industry. The Secretary's letter clarified the subject for many Members of Congress who were confused and who found it difficult to understand why payments should be continued, even though the restrictions on production are temporarily lifted.

# Text of Wickard Letter to Sen. Byrd Concerning Sugar Payments Made Public

**Official Release**

The Department of Agriculture made public on March 9th the following letter from Secretary Claude R. Wickard to Senator Harry F. Byrd of Virginia in response to the Senator's letter of March 6 ,1942:

Hon. Harry F. Byrd
United States Senate
Dear Senator Byrd:

Acknowledgement is made of your letter of March 6, 1942, with respect to the pending appropriation of $47,962,910 for payments to sugar beet and sugarcane producers under the Sugar Act of 1937, as amended. You are of the opinion that the proposed expenditures represent in their entirety a drain on the Treasury, constitute "nonessential spending", are made primarily for reducing production, and provide for unjustified payments to large producers. You therefore ask that this Department "make no contracts for these benefit payments until Congress has had an opportunity to review the sugar control legislation."

We are in full accord with your objective to eliminate nonessential federal expenditures. But in this instance, the facts are, as I shall explain in some detail, that the elimination of the 1942 crop payments may actually result in a greater net outlay of Treasury funds; would preclude continuation of important social measures; would unquestionably reduce 1942 plantings in the beet area; and would necessitate a tremendous toll from consumers, a large portion of which would provide a huge and inflationary "windfall" for foreign producers and much of which would accrue to large domestic producers. Moreover, any commitment made to producers with respect to 1942 payments arises out of congressional action of late December, 1941 and not from any contracts entered into by this Department.

If the conditional payment authorized by the Sugar Act are not made, it would be necessary, under the Emergency Price Control Act, to increase the ceiling price for sugar at least 80c per hundredweight after 1942 crop sugar becomes available. This minimum increase would meet the requirements of that Act only in the event that revisions in the purchase contracts, under which growers market their sugar beets and sugarcane, could be made in a manner so as to give growers the total amount of the ceiling price increase. Should no revision in contracts be made, an increase in the ceiling price of as much as $1.50 per 100 pounds would be necessary. Consequently, there would be a direct increase in cost to the Treasury on purchases of sugar and of the many food products containing sugar for the armed forces, as well as on purchases for our Allies under the lend-lease program. Moreover, the price of industrial alcohol, under war-time conditions, is determined by the prices of sugar since so large a portion of our requirements is made from the sugar contained in molasses. Therefore they would also have to pay increased prices for vast quantities of essential war materials requiring the use of industrial

alcohol (explosives, anti-freeze, plastics, lacquers, solvents, etc.).

Furthermore, the excise tax on sugar provided for in the sugar legislation is part of a comprehensive program for dealing with the problems of the sugar industry which was recommended by the President in 1934, and again in 1937. In the absence of conditional payments to producers, it is doubtful whether the continuation of the tax on this one food commodity could be justified. In fact, the continuance of the tax under such conditions would be deemed by many an act of bad faith. Repeal of the tax would result in a loss to the Treasury of collections which have averaged $74,000,000 in the last three fiscal years. In appraising the sugar program, one cannot lose sight of the fact that its expenditures are covered by a special ½ cent a pound excise tax on sugar which not only pays all the costs of the program but has, during the past 3 years, shown a substantial net return to the Treasury. In other words, this program not only pays its own way but puts money into the Treasury besides.

The objectives of the legislation of effecting a relatively just distribution of the income of the industry as between grower, processor and laborer, of preventing child labor, and of conserving the soil —all of which objectives are attained through the tax and conditional payment provisions—may not appear to some as a valid basis for continuing this appropriation. However, there are many large groups of citizens who are vitally interested in these objectives. Various public agencies who have investigated these matters have commended the results of the program, the most recent instance in point being the report of the Select Committee to Investigate the Inter-state Migration of Destitute Citizens (77th Congress, 1st Session, House Report No. 169) which refers with approval to the safeguarding of higher labor standards in the sugar program. It should also be pointed out that the Congress, on three occasions within the past eight years, after thorough investigation by appropriate congressional committees of the contentious issues involved in sugar legislation, has endorsed these objectives by reenactment of the legislation.

It cannot be stated too emphatically that failure to make this appropriation would have a serious effect on beet sugar production in this country this year. Although it may eventually be explained to the great majority of beet growers that the loss in government payments would be made up by increased sugar prices to consumers, the immediate effect of the failure to appropriate would be to cause considerable confusion and uncertainty among beet growers today when planting is just getting under way and would unquestionably lead many growers to curtail, if not cease, planting beets.

It is true that it was found necessary under the provisions of the Act to curtail somewhat 1941 beet acreage with respect to which payments were to be made, because of the pressure of record carry-over stocks in that area, as well as of large stocks in other areas supplying the United States market. Since most of the sugar beet arceage is planted in the spring months and a decision had to be made before planting, seven months prior to "Pearl Harbor", anticipatory judgments of possible developments in the Far Eastern situation could not have been taken into consideration. However, it is usually overlooked that domestic sugar production, particularly in the continential beet and cane areas, has increased very greatly under the sugar programs. For example, the crops of 1938 and 1941, inclusive, produced in the continental beet and cane areas averaged 22% and 103%, respectively, above the last four crops grown in these areas immediately prior to the sugar programs.

On the assumption of a 6,000,000-ton consumption, an increase of from 80c to $1.50 per hundredweight in the ceiling price would increase the annual consumer cost of sugar by $100,000,000 to $180,000,000 per year. In addition, the cost of industrial alcohol would increase by $35,000,000 to $65,000,000 per year if the present relationship between the price of sugar and alcohol continues. The increased levy on consumers would create an inflationary windfall of from $60,000,000 to $110,000,000 per annum for foreign producers. It would also permit certain large firms engaged in the production of domestic sugar to receive very substantial increases in income. For example, a producer making 100,000 tons of raw sugar would receive, if the appropriation were made and the condition for payment met, payments of $720,000. In lieu of such payments the indicated increase in ceiling price would result in an additional income ranging from $1,600,000 to $3,000,000 or $880,000 to $2,280,000 in excess of that obtained under the payment program. Furthermore, if the Congress fails to make this appropriation and the revisions in the purchase contracts referred to earlier are not made, processors of sugar beets and sugarcane would enjoy exorbitant returns.

With respect to your request that we make no contracts for these conditional payments, we wish to inform you that no contracts are provided for under the Sugar Act of 1937. The Act merely authorizes the Secretary to make payments to producers upon fulfillment of the conditions specified in the Act itself. You will recall that there was extended debate in the Senate in December of 1941 when extension of the Act was under consideration. This debate covered in part the same issues to which you now refer and the amendments you then proposed were rejected by the Senate. Many farmers in the sugar beet producing area, relying upon this action taken by Congress, have made arrangements for planting and in some instances have completed planting the 1942 crop.

In pointing out that the failure to make this appropriation will create several serious public problems and will not alleviate the Treasury position, this Department does not disregard the large returns for a number of individuals or corporations which may result from this or any other agricultural program. The Department has advised the Congress heretofore that under any method of protection to producers, whether such protection takes the visible form of direct payments with federal conditions attached or the invisible form without federal conditions, some producers, whether they be small or large, whether they be individuals, partnerships, or corporation, will make large returns. This problem is primarily part of the general national problem of working out equitable tax legislation with respect to excess earnings.

Sincerely yours,

(Signed) Claude R. Wickard

Secretary of Agriculture

# Excerpt From Broadcast By H. V. Kaltenborn February 15th, 1942, and Comments by Mr. Farwell

"Florida's winter business is off from thirty to fifty per cent as compared with a year ago, but so far as anyone can see, it's still mighty good. Everyone is asking how they can do business without motor cars. And they're finding the answers. Salesmen who use motor cars in mid-western states are doubling up, thus saving tire mileage. There is talk of special baggage busses for traveling salesman. Retail tire dealers tell me they have large stocks on hand they don't know what to do with. They can't sell them, use them or dispose of them and no one has told them what to do with them. Some people have been buying second hand cars with good tires just to get the tires.

"A few hotels have begun to ration sugar. In most places sugar is still wasted. Florida boosters kept telling me their state could produce all the sugar this country could consume. My answer was 'Yes, and you'd certainly make us pay a fancy price for it.' Someone ought to figure out how much it has already cost the American sugar consumer to stimulate the growing of beet sugar and cane sugar in the United States. Make the tariff high enough and you can grow or manufacture anything at home. But the consumer pays! And you start the world on a crazy competition of tariffs and quotas that will soon lead to another world war. And what about the Good Neighbor Policy?"

---

February 16, 1942

Mr. H. V. Kaltenborn
National Broadcasting Company
New York, N. Y.

Dear Mr. Kaltenborn:

I have listened to your Sunday afternoon news commentaries for as long as you have broadcast. I have always felt that your program was an unbiased, factual presentation of the news and facts surrounding the news. However, on yesterday your general comments as to the ability of the continental domestic sugar industry to produce sugar only at an exhorbitant cost to the consumer is contrary to the facts that have existed and do exist.

Knowing your fair mindedness and knowing your desire to correctly understand and present facts, I hope you will allow me the liberty of presenting to you the true facts about the sugar situation.

We must first understand just what we are talking about and in this connection there are two points which I wish to make. First, you will probably remember that before Mr. Henry Ford got into volume production, the Ford automobile sold at approximately twice its 1941 price. I am making this point because we in Louisiana know that if we had been allowed to produce to the full ability of the lands on which we pay taxes, that we would have been able to put sugar into the hands of the American consumer at a price less than they have paid in the years in which we were restricted in our production.

Secondly, it is a well known fact that the American consuming public pays more for practically every item that it uses in its daily life than would be necessary if we were to hunt the world over to obtain these articles where they could be most cheaply produced. For instance, corn can be produced much cheaper in Argentina and in Mexico than in our middle west. Cotton is being produced more cheaply in Brazil than in the cotton belt of this country. Steel and iron can be produced cheaper in Europe than in this country. An outstanding example of this was shown in 1937 when the Peruvian sugar industry began a tremendous program of expansion. At that time they bought millions of dollars worth of sugar mill machinery not from the United States but from the Krupp Works in Germany. Therefore, I believe that it is a little unfair for us to want to maintain the American standard of living on one hand and to single out one industry on which to blame the maintenance of the American standard of living, on the other hand.

There is no doubt in anyone's mind that we could produce sugar cheaper. The yields from our fields today are equal to or better than Cuba's, in terms of sugar cane per acre. Our older sugar factories have not reached the efficiency of the modern Cuban houses, but some of our more recent sugar factories have. Therefore, the question of the cost of production resolves itself into two main factors, and they are the cost of taxes and the cost of labor.

You can find realms of testimony about tropical labor receiving any where from fifteen cents to seventy-five cents per day. Mr. John Gunther, in his recent book called "Inside Latin America," made a specific point of the horrible conditions under which the Peruvian sugar industry's labor works. We, in Louisiana, on the other hand are presently paying our lowest class of men field laborers $1.50 per day for a nine-hour day, in addition to which we furnish them a free home, a free garden, free medical attention and carry for them at no cost to them complete workmen's compensation coverage.

To get back to the broader aspect of the sugar situation, I have never felt that it was fair to the American consumer to put themselves in the hands of any foreign power for a larger percentage of an item that plays such a important part in the American diet as sugar. An outstanding example of what happens in a case like this must come to your mind if you recollect the last days of 1919 and the spring of 1920. As soon as the sugar which resulted from the 1919 domestic crop had been sold, the Cubans offered to sell their 1920 crop to the American Government at 18c per pound. This was in spite of the fact that the highest sales at that time of the domestic crop had been 14c. You will probably recall that that offer was turned down and as a result of that, sugar went to 22c per pound.

Again in the fall of 1939, when war was declared in Europe, Cuba froze her stocks of sugar and did not sell in the American market one single pound of sugar for a period of over sixty days, whereas this particular time of year would normally be one of her heaviest sales period to this country. You will recall that in 1939, it was principally the Puerto Rico, Louisiana, Florida and beet sugar which was released from marketing quotas by Presidential order that broke the upsurging prices and stopped the fast developing sugar panic.

In calculating your cost to the American consumer figures, I am afraid that you might have been misled by the same thing that misled Vice-President Wallace in 1936, when he was Secretary of

Agriculture. At this time he took the "world price" and multiplied it by the consumption figure and then took the domestic price and multiplied it by the consumption figure and arrived at the conclusion that if these two things could be compared, the domestic sugar industry was costing the American public, for the year 1936, $350,000,000.00. This was the way Mr. Wallace's statement was reported by the press. As a matter of fact, in his actual written statement, he surrounded this calculation with five theoretical conditions that did not exist. However, this statement was so widely circulated that finally a request was made of the Department of Commerce in Washington to analyze the possible effect of the so-called "world price" sugar on the American market. On October 23, 1941, the Department of Commerce released a statement which covered this whole situation in a very few worlds. I quote their statement: "In the last few months, so-called 'world sugar prices' have increased more than 100%. World sugar does not come to the American market except for refining and subsequent export. At the present full duty rate of 1.875c per pound on raw sugar, freight and current world prices would bring the cost to more than 4c per pound, or more than the current ceiling."

Thus you will see that between 1936 and October, 1941, the world price situation changed so that if we used that in our calculation, we would have the American public paying more for "world sugar" than they do for domestic sugar. This might have been a splendid argument for us to use, but knowing something of the sugar business, we knew all along that inasmuch as no world price sugar was actually sold in this country, this calculation should have never been brought into any discussion of sugar as far as the American consumer is concerned.

I have heard the claim of Florida that they could produce all of the sugar that this country could consume. I do not agree with them now and I never have agreed with them because I have been unable to find sufficient acreage in Florida of the type soil suitable for sugar production to justify this claim.

I will tell you frankly that we could not do it in Louisiana because we do not feel that it is proper or right to put lands into sugar cane except that type of land which is best suited for its most economic production.

It might be interesting to note here that although the biggest crop we ever produced was in 1938, when we produced 491,000 tons of sugar, we have recently made a survey and we feel that we can partially make up this nation's deficit by producing approximately 604,000 tons of raw sugar per year. This means simply putting back into production the good lands which have had to remain idle or go into other crops, and does not mean any increase in the number of sugar factories or wild speculation in sugar land because we feel that this would not be a sound policy.

One more thing about the protection which the domestic sugar industry offers to the American consumer. An examination of the Agricultural Statistical Yearbook, published by the Department of Agriculture, will show a very definite relationship between the price of sugar and the size of the continental domestic crop. Going back to 1919, an examination of this record shows that when there are large crops produced in this country, the price of sugar tends to stay down. When there are small crops produced in this country, the price of sugar tends to go up. For instance in 1923, when foreign areas supplied most of our consumption requirements, the United States consumer paid $1,047,000,000.00 for 5,285,000 tons of refined sugar. In 1938, when the domestic areas were supplying more than two-thirds of our total consumption requirements, our consumers paid $675,000,000.00 for 6,267,000 tons of refined sugar. In other words, they paid $390,000,000.00 less for 982,000 tons more sugar.

There has always been some question about the sugar tariff. In this connection I hope you will keep in mind the fact that the domestic sugar industry does not get the money from the sugar tariff. That goes to the United States Treasury. Recently there has been quite a lot of discussion about the conditional payments made to the sugar growers. In this the sugar industry is unique because as far as I know, it is the only part of the American farm program that pays its own way. The money derived from the processing, or excise, tax which we pay on sugar which we sell, is turned over to the United States Treasury and after all administrative expenses have been deducted, a certain amount of this money is paid back not to the sugar mills, but to the sugar cane growers. Since this program was inaugurated in 1937, there has been an average of over $13,000,000.00 a year left in the United States Treasury after all payments have been made to all growers and all administrative expenses deducted therefrom.

I hope you will realize that I am in no way criticizing you or what you have to say over the radio. However, I believe from listening to your program that you are a fair minded American and, therefore, must realize that there are two sides to almost every question. It is for this reason that I have taken the liberty of presenting to you the factual side from records which I have accumulated over a period of almost twenty years.

I noticed from your talks that you have been making various trips around the country. If, in the course of your trips, you should come to Louisiana, I should consider it a pleasure to be able to go over some of the ground and some of the work that is being done by our sugar industry which is, after all, almost one hundred and fifty years old and, therefore, must have some reason or right for existence.

Yours very truly,
Chas. A. Farwell, Chairman
Educational Committee

---

H. V. KALTENBORN
9 Garden Place
Brooklyn, N. Y. February 26, 1942

Mr. Charles A. Farwell
Chairman, Educational Committee
New Orleans, La.

Dear Mr. Farwell:

Thanks for taking the trouble to send me your interesting comments on the sugar situation. It is all part of the picture.

Ever since my Harvard days, I have been constitutionally opposed to too much tariff stimulus to home industry. I am also very much in favor of a generous Good Neighbor Policy, because I know how important that is in hemisphere defense.

But you have a case on behalf of an industry that exists and that has certain rights. I would be the last man to deny it. Thanks for the friendly spirit of your letter.

Sincerely yours,
Signed: H. V. Kaltenborn

"I use MAGNOLIA PRODUCTS 100% because I know I'm getting my money's worth"*

a Sherer McALLEN, TEXAS

*Pictures show Mr. Sherer working in his citrus grove near McAllen, Texas, where he grows oranges, grapefruit, lemons and limes.*

From the citrus groves in the Valley to the wheat fields in the Panhandle every farmer is vitally concerned with the cost of operating power equipment. Of all the costs involved in modern farming, it is the one most easily controlled through proper selection of tractor lubricants and fuel.

It is worth knowing, as Mr. Sherer and thousands of Southwestern farmers know, that you can always be sure of getting your money's worth by purchasing Magnolia Products.

A plus value that contributes to this worth is the helpful service and advice that local Magnolia Agents are qualified to give.

**This is a voluntary statement for which no compensation of any description was given to Mr. Sherer.*

MF-102

MAGNOLIA AGENTS

Offer immediate delivery of tractor lubricants and fuels

A SOCONY-VACUUM COMPANY

MAGNOLIA PETROLEUM COMPANY

March 8, 1942

Mr. H. V. Kaltenborn
Brooklyn, N. Y.

Dear Mr. Kaltenborn:

I want to thank you for your letter of February 26, 1942.

Your talk today struck me so forcibly I am asking everyone with whom I come in contact to write to the President asking him to crack down on all of us so that not one single minute of production time will be lost. The nation as a whole does not seem to realize yet that all of the gold at Fort Knox cannot buy back one single minute of lost time.

I know that the most urgent time is that which can be used to produce planes, ships, tanks and guns. Next to that in importance is the time used for producing food. I wonder if you realize how much of the actual food producing area of the world is either a battle field or as a result of war has been rendered "scorched earth?"

In the case of sugar, the latest information available indicates that out of a normal world production of thirty-two million tons, more than nine million tons will not be produced this year due to the fact that the land on which it is normally produced has either been "scorched" or is being fought upon. Yet, in our effort to produce more sugar, we are still operating under laws that limit our work hours.

You said today that where a man was under contract to produce and where a contract has been figured on the basis of straight time, some adjustment should be made if he is required to pay substantial overtime. The same theory should apply to farming. Our possible production profits are limited by price ceilings on our products and the record will show that these ceilings were calculated on labor costs figured on a straight time basis. In agriculture, depending so much upon the elements as it does, there arises a problem that industry does not face. If we are not able to work and process our crops at all for a period of ten days on account of the weather, we cannot make up this lost time by extra work hours without severe penalties. In other words, we would be penalized for trying to make up time lost through no fault of management or labor.

In your letter of February 26, 1942, you mentioned your Harvard days. When I went to V. M. I. they taught the Harvard system in business economics. As a result, I came out of school pretty much of a free trader. It was not until I reached a responsible position in production that the fact was driven home to me that we cannot produce as cheaply while maintaining the American standard of living, as some other fellow who pays taxes which are much less than ours and who employ three men for the price we pay one. It all comes back to the old saying, "You cannot have your cake and eat it to."

If we want our labor paid good wages, we have to pay a fair price for what that labor produces. If we shop around enough, we will always find some other fellow who will undersell us, but if we buy from him, then our labor becomes unemployed. Therefore, I feel that if we can produce at a price that represents some foreigner's cost plus the difference between our standard of living and his, we have done a good job for our consumers.

I am taking the liberty of enclosing a pamphlet which we got out in order to help the public better understand the subject of sugar in the national defense program.

Yours very truly,
Chas. A. Farwell, Chairman
Educational Committee

# Fertilizer Situation

The American Sugar Cane League, mainly through its Washington office, has been ardently working to insure an adequate supply of fertilizer for the sugar cane producing farmers.

The Office of Agricultural Defense Relations determines the needs for fertilizer and make recommendations to the War Production Board, which allocates the fertilizer to the distributors.

The fertilizer is not allocated or rationed to farmers directly, but it is made available to the distributors and it is intended that the farmers make known to their distributors their fertilizer needs and the dates when each normally begins to spread fertilizer. The allocation to the distributor is made on a monthly basis.

As early as February 2d, our Washington office was informed that the supply of Cyanamid would be approximately 20% of the amount used last year. The supply of Sodium Nitrate would probably be 50% or more and it was expected that high mixed fertilizers would be available in sufficient volume to provide the balance of the requirements.

On March 11th the Washington office was advised that 15,000 tons of Sodium Nitrate would be made available to the sugar belt. It was thought that eleven or twelve thousand tons would be allocated for delivery during March and the balance, or three or four thousand tons, would be made available to the distributors before April 10th.

The Office of Agricultural Defense Relations and the War Production Board are very anxious that the fertilizer available be equitably distributed between large and small producers. They feel that small producers should not be made to wait until April to receive their fertilizer but that they should receive their proportionate share in March and in April.

The two above mentioned agencies accepted the co-operative offer of the American Sugar Cane League to undertake to see that the fertilizer would be equitably distributed. To implement this effort the President of the American Sugar Cane League appointed a committee of its three Vice Presidents who are well distributed in the area, to make every effort to assist in the equitable distribution of the fertlizer. The committee is composed of Mr. George L. Billeaud, Broussard, La., Mr. J. J. Shaffer, Jr., Ellendale, La., and Mr. Dubourg Thibaut, Donaldsonville, La.

The fertilizer manufacturers have assured the Federal agencies that their distributors could be depended upon to make an equitable distribution of this Nitrate of Soda.

It is therefore very important that every producer needing fertilizer contact his normal source of supply and place his order so that he may be served.

**FOR SALE**

**GOLDEN RIDGE FACTORY INTACT**

**500 ton capacity, 6 foot mill; Corliss Engine; Mirlees-Watson Knives; Steel Carrier; Double Effects; 2 Vacuum Pans; Water Purification and Vacuum Pan Cooling Systems, Etc.**

**Contact Mr. H. M. Sevin,**
Secretary-Treasurer,

**WEBRE-STEIB CO., LTD.**
**Vacherie, La.**

**PAUL, RICE & LEVY**
INCORPORATED

**Wholesale**
**INDUSTRIAL, MILL & MARINE SUPPLIES**

Day, Ra. 6123 Night, Fr. 2019

**501-505 Poydras St.**

**New Orleans, - - La.**

**O I C VALVES**
**GUILD & GARRISON PUMPS**
**INTERNATIONAL INDUSTRIAL PAINTS**
**CHESTERTON PACKING**
**K-TING MANILA ROPE**
**CONSOL OILS**
**VULCAN SOOT BLOWERS**

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

LAMBORN & COMPANY, INC.
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

LE BOURGEOIS BROKERAGE CO.
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
HARRY L. LAWS & CO., INC.
Brokers and Distributors
SUGAR and MOLASSES
SUGAR FUTURES
American Bank Building New Orleans, La.

GAY, SULLIVAN & CO., INC.
SUGAR
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

STAUFFER, ESHLEMAN & CO., LTD.
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
CYANAMID
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

INDUSTRIAL LUBRICANTS

BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
STANDARD OIL CO. OF LA.

FOR SUGAR CANE FINANCING
STATE AGRICULTURAL CREDIT CORPORATION, INC.
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

AMERICAN MOLASSES CO.
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LEGardeur Frank Youngman
R. J. LEGARDEUR & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

PENICK & FORD, LTD., INCORPORATED
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

STANDARD SUPPLY AND HARDWARE CO., INC.
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

E. A. RAINOLD, INC.
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 20 NEW ORLEANS, LA., APRIL 1, 1942 No. 13

# League Concludes Arrangements for Producing Important Ingredient of Smokeless Powder

On Decmber 18, 1941, the President of the American Sugar Cane League offered to the Secretary of Agriculture the cooperation of the Louisiana sugar industry in the national defense effort. Soon thereafter the shortage of alcohol and the shortage of raw materials for the production of alcohol received considerable publicity.

The Contact Committee of the American Sugar Cane League, composed of practical farmers, maintains contact for the industry with the scientists at the Federal Sugar Experimental Station at Houma, Louisiana, and the State Experiment Station at Louisiana State University, and with the sugar cane farmers generally. This Committee undertook the study of producing sorgo in the Louisiana sugar area as a war effort.

On January 6, 1942, the President of the League reiterated the desire of the Louisiana sugar industry to cooperate in the war effort and suggested to the Secretary of Agriculture that it seemed possible to undertake the production of sorgo for molasses and alcohol production, utilizing available lands and the processing facilities already existent and not used at the time that the processing of sorgo could be anticipated.

The following letters to the Secretary of Agriculture from Mr. Kemper and to Mr. Kemper from the Secretary of Agriculture definitely established the sorgo for molasses program, on a large scale experimental basis, in the Louisiana sugar area.

Franklin, Louisiana
February 20, 1942

Hon. Claude R. Wickard, Secretary of Agriculture
U. S. Department of Agriculture
Washington, D. C.

Dear Mr. Secretary:

Thank you very much for your letter of February 11th, in which you ask the American Sugar Cane League to cooperate with the Department of Agriculture on a plan to grow 10,000 acres of sorgo and convert this product into syrup for the alcohol producers. First of all, we assure you of our complete cooperation on this project. As a matter of fact, we were prepared to respond favorably to a request for the planting of sorgo in much greater quantity than 10,000 acres will produce. Since there is a definite shortage of sugar products, not only for the alcohol industry but for consumption as sugar, our natural desire has been redoubled under present conditions to use all available sugarcane acreage for the production of sugar products; and this feeling dates back to the Munich incident of 1938. Farmers are patriotic citizens as a general rule, and we can assure you that the Louisiana sugar cane growers will compare favorably with any farming group under your jurisdiction.

Our organization will attempt immediately to obtain definite commitments from the necessary number of growers and grower-processors, and we will report to you definitely as soon as we can state that 10,000 acres have been pledged for the growing of sorgo and its processing into syrup.

In accepting your proposal, we respectfully ask for definite commitment and understanding with regard to the following related matters:

1. No mention was made in your letter of production loans for our small under-financed farmers, who will have to depend upon the agencies of the Farm Credit Administration. We ask that appropriate instructions be issued to local FCA Agencies.

2. We note further your statement that "Consideration will be given to the making of changes that may be found necessary in the farming practice requirements in connection with payments under the sugar program." Our farmers will want definite assurances that these changes have been agreed to by the Soil Conservation Division and the Sugar Division. We understand that the Louisiana State Con-

THE
SUGAR BULLETIN
414 Whitney Bldg., New Orleans
Marcel J. Voorhies, Editor
Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
Subscription Price, 50 Cents per Year.

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE
President, W. C. Kemper, Franklin, La.
1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

EXECUTIVE COMMITTEE
W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

servation Committee has filed a written recommendation with the AAA, and it would help materially in our obtaining the requested number of acres if a confirmation is made either to the State Committee or by official determination. We trust that the definite assurances regarding farming practices will cover not only the sugar program but the compliance requirements for all soil-conservation payments for farmers who may grow other crops besides sugarcane.

3. As we view the problem, four cane mills will be needed since each can process the sorgo grown on about 2,500 acres. We will be in a position to assure you that four mills have made their facilities available under your proposed plan whenever it is agreed finally to proceed. The County Agents in the factory districts to be used will help us to obtain commitments from the necessary number of farmers to supply 2,500 acres of sorgo to each of the four mills. The whole program should be put into effect by March 1st, and a form of grower-processor contract should be approved for the purchase of the sorgo crop.

4. We would like to know whether the four mills will sign a formal contract with the Commodity Credit Corporation, regarding the purchase and distribution of the syrup.

5. As the sorgo seed must be obtained quickly, we would appreciate having the Bureau of Plant Industry indicate the procedure with regard to the selection of authentic *certified* seed and the purchase and delivery thereof. Our preference would be to have the Commodity Credit Corporation purchase the seed, then forward the seed to the designated factories for distribution among farmers.

6. The same type of assurances and arrangements will have to be made in connection with fertilizer.

7. In order to facilitate and to expedite procedure, we recommend the appointment of one agent of the Department of Agriculture to work out the details and to put the program into effect, through collaboration with Mr. Marcel J. Voorhies, who has been designated as the agent of the American Sugar Cane League for this purpose.

Your further instructions are awaited with a great deal of interest. In the meantime, we again assure you that our organization will not allow any other functions to interfere with full cooperation towards the satisfactory completion of this project.

Sincerely yours,
Signed W. C. KEMPER,
President.

DEPARTMENT OF AGRICULTURE
Washington
March 7, 1942

Mr. W. C. Kemper, President
American Sugar Cane League of the U.S.A.
New Orleans, Louisiana
Dear Mr. Kemper:

This is in reply to your letter of February 20 transmitted by Senator Ellender concerning the proposed program for producing 10,000 acres of sorgo for conversion into industrial alcohol. The Department appreciates the willingness of the American Sugar Cane League to undertake the project.

The Department of Agriculture is undertaking the program through its agencies as outlined in our letter to you of February 11. We believe that the specific problems you raise can be handled satisfactorily, as follows:

1. The Farm Credit Administration will inform the local Production Credit Associations in the area involved of the program. It is confident that the associations will finance those individuals who can qualify for loans for this purpose.

2. The farming practice requirements under the 1942 sugar program will be reduced by 50 per cent from the 1941 requirements, and it is believed that this action will avoid any interference with the proposed sorgo plantings. The Agricultural Conservation Program appears to be sufficiently liberal without any further changes to permit the necessary plantings of sorgo under this program.

3. The Commodity Credit Corporation will examine and approve proposed contracts between the mills and the individual growers. The essential feature from the standpoint of the Commodity Credit Corporation will be a provision assuring that producers receive the payments specified in our letter of February 11 in connection with sorgo from which the syrup purchased by the Commodity Credit Corporation is manufactured.

4. It will be necessary for the Commodity Credit Corporation to enter into agreements with each of the mills regarding the purchase and distribution of the syrup. The Commodity Credit Corporation will undertake immediately to draft an agreement form for use by each of the cooperating mills. Since the essential basis for the agreement with the mills including the payments to growers and allowances for transportation and processing were covered in our letter of February 11, it should not be necessary to delay the program until the agreements are finally executed.

5. We believe that your Association or the mills can undertake the purchase and distribution of the seed to the individual farmers more expeditiously than the Commodity Credit Corporation. The Bureau of Plant Industry will advise you in the next few days as to the varieties, which in view of availability of seed stocks, are recommended for planting. At the same time they will supply the information collected as to sources of seed of the recommended varieties. Representatives in the sorgo project of the Bureau of Plant Industry who are stationed in Louisiana will be instructed to offer further assistance.

6. Upon receipt of information as to the quantity required, the particular fertilizer distributors involved, and the required delivery dates, the Department, through its fertilizer committee, will undertake immediately to obtain the allocation of the necessary fertilizer from the War Production Board.

7. The Bureau of Plant Industry will designate a representative to work on this project during the growing period for the purpose of obtaining the maximum field production. The Bureau of Agricultural Chemistry and Engineering will designate a representative to work with the mills in the processing of the sorgo. The agreements between the Commodity Credit Corporation and the mills covering the purchase and distribution of the syrup will be administered through the Regional Director of Commodity Credit Corporation at New Orleans.

Sincerely yours,
Signed: Claude R. Wickard
Secretary.

Subsequent to Mr. Kemper's letter of January 6, 1942, the American Sugar Cane League sent a representative to Washington to confer with representatives of the Department of Agriculture to undertake the joint formulation of a plan whereby the sorgo for molasses program could be effectuated. Conferences were participated in by representatives of the Bureau of Plant Industry, Bureau of Agricultural Chemistry and Engineering, Bureau of Agricultural Economics, the Southern Region of the Agricultural Adjustment Administration, Commodity Credit Corporation, Agricultural Defense Relations Board and the American Sugar Cane League.

Since the production of sorgo in the Louisiana sugar area and the processing of sorgo into molasses are undertakings on which very little information exists, it was considered advisable to limit the program this year to ten thousand acres, or a substantial experimental basis. Substantially, the Commodity Credit Corporation undertakes to purchase from the cooperating sugar mills the molasses produced from a ton of sorgo for $5.50 at the mill. This $5.50 is to be allocated as follows: $4.00 per ton of sorgo is to be paid to the producer at the nearest hoist to the farm; 50c on an average is allocated for hoisting and transportation of the sorgo from the farm to the mill; $1.00 is allocated to the processor for the processing of the sorgo into molasses. The mills must observe the following:

1. Produce molasses of a density of not less than 78%.

2. Sorgo shall not be harvested at a stage of maturity earlier than the dough stage.

3. The final syrup shall not contain starch or sugar crystals to the extent that it cannot be pumped freely at 140° F.

4. Inability to pump the finished syrup freely at 140° F. because of presence of starch is to be prevented by centrifugal separation of starch from the sorgo juice and/or treatment with a starch converting preparation such as malt extract.

5. Inability to pump the finished syrup freely at 140° F. due to excessive amount of sugar crystals is to be prevented by suitable inversion of sucrose during processing.

Representatives of the Bureau of Agricultural Chemistry and Engineering will be assigned to the cooperating mills to assist with the various processing problems which may arise.

The Youngsville Sugar Company, Inc., Youngsville, La., the Iberia Sugar Cooperative, Inc., New Iberia, La., and the Columbia Factory at Franklin, La., are the Louisiana sugar processing plants undertaking this program.

The sorgo will be produced by independent sugar cane producers under contract with the cooperating mills. The terms under which the sorgo will be produced and delivered to the mills are contained in the following purchase contract approved by the Commodity Credit Corporation.

## Sorgo Production and Purchase Contract

State of Louisiana
Parish of..... Number:.....

CONTRACT AND AGREEMENT entered into at.....this.....day of..... 1942, by and between..... hereinafter called the "PRODUCER", on behalf of himself, his heirs and assigns, and The Youngsville Sugar Company, Inc., hereinafter called the "PURCHASER".

WITNESSETH:

1. To permit the undertaking of a sorgo production program as a means of supplying raw material for industrial alcohol to meet the war requirements, the Commodity Credit Corporation has entered or has agreed to enter into an agreement with the Youngsville Sugar Company, Inc., for the purchase of sorgo molasses to be produced under the program and, as a result thereof, the PURCHASER is desirous of buying sorgo cane in order to manufacture sorgo molasses and the PRODUCER being the owner or lessee (as the case may be) of the following described property situated in the Parish of....., to wit:
and, being desirous of planting and cultivating..... acres thereof, hereinafter called the "ACREAGE", in specified varieties of suitable sorgo cane in cooperation with the program and to sell the sorgo cane therefrom produced by him under the program, have agreed and do hereby agree as follows:

2. The PURCHASER will furnish suitable syrup sorgo seed to the PRODUCER at cost (approximately 7 cents per pound).

3. The PRODUCER agrees to plant the ACREAGE, using only sorgo seed obtained from the PURCHASER.

4. The PRODUCER agrees to plant the ACREAGE, weather conditions permitting, within five days of the date or dates specified by the PURCHASER.

5. The PURCHASER, without assuming any responsibiilty for the production of the sorgo crop, will, upon request of the PRODUCER, endeavor to supply the PRODUCER from time to time with the best advice obtainable relative to proper methods of preparation of seed bed, planting, fertilization, and cultivation of the acreage of sorgo.

6. The PRODUCER agrees that, weather conditions permitting, he will harvest the acreage of sorgo in the manner specified by the PURCHASER, and sell and deliver the entire quantity of sorgo produced

on the acreage within five days of the dates allotted to him so to do by the PURCHASER, and the PRODUCER further agrees that, in the event of his failure to harvest the acreage of sorgo as specified by the PURCHASER, such failure will constitute a breach of this contract and will render this contract null and void in its entirety.

7. The PURCHASER agrees to advise the PRODUCER in writing, no less than one week in advance of the specified schedule of dates which the acreage of sorgo shall be harvested and delivered to the PURCHASER.

8. The PURCHASER agrees to accept delivery of the entire stalk of sorgo, including all sorgo leaves attached thereto, but not including the seed heads which must, if required by the PURCHASER, be cut from the sorgo stalk and retained by the PRODUCER and excluded from delivery to the PURCHASER. The PURCHASER shall, early in the harvesting period, determine whether the sorgo stalks can be accepted for delivery without removing seed heads and so advise the PRODUCER. If the sorgo stalks including seed heads can be successfully processed into sorgo molasses, the PRODUCER will in such event be allowed by the PURCHASER to effect delivery of the sorgo, if he desires so to do, without first removing the seed heads from the stalks.

9. (a) The PRODUCER agrees to deliver the sorgo harvested at the time and in the manner already herein provided at the nearest hoist; it being understood that the cost of hoisting, and the transportation from such hoist to the PURCHASER'S plant at Youngstown, Louisiana, will be borne by the PURCHASER.

(b) The PURCHASER agrees to accept delivery and pay for all sorgo produced on the acreage and so delivered by the PRODUCER at the price of four dollars ($4.00) per ton (of 2,000 pounds).

10. The PURCHASER agrees to pay the PRODUCER in full, at the price stipulated in paragraph nine (9) of this contract, at the close of each week during the sorgo harvesting season, for all sorgo delivered by the PRODUCER and accepted by the PURCHASER in accordance with the terms of this contract during the preceding week.

11. The weight of sorgo delivered under this contract shall be the weights determined on the yard scales at the PURCHASER'S plant.

12. IN FAITH WHEREOF, the parties hereto have signed these presents in duplicate, on the day and date first above written, in the presence of the undersigned competent witnesses.

.....
(PURCHASER)

Witnesses:

By.....

.....

.....
(Title)

.....
(PRODUCER)

By.....

.....

.....
(Title)

The representatives of the Bureau of Plant Industry have assisted in locating and purchasing the necessary sorgo seed for the program. The seed is being bought on samples under the immediate supervision of the above referred to representatives.

The week of March 30, 1942, has been set aside for a group of field meetings. All of the sugar cane producers who have signed contracts to produce sorgo and other interested farmers will be called at group meetings, which will be attended by representatives of the Bureau of Plant Industry, representatives of the Bureau of Agricultural Chemistry and Engineering, representatives of the Louisiana State Agricultural Experiment Station and the American Sugar Cane League. The meetings are called under the auspices of the Agricultural Extension Agents, who have been cooperating splendidly with the program, the success of which depends largely upon their efforts.

## Keep Your Sugar Bulletins for Reference to Government Orders

*(By C. J. Bourg)*

In view of the fact that the Sugar Bulletin can be kept in a looseleaf binder for ready reference, and in view of the many and multiplying orders and regulations concerning sugar during the war emergency, the Editor of the Sugar Bulletin has decided to reprint the more important and current Government orders and regulations as they are issued. This policy is considered to be of practical value to the members of the League for the reason that most of the orders and regulations will have application at the time of the marketing of the 1942 crop; and, by keeping the issues of the Sugar Bulletin, each member will have a reference book immediately available when questions may arise.

In keeping with this policy, there are reprinted in other parts of this issue the following:

1. M-55-d: The Zoning Order by which cane sugar refiners are restricted in the distribution of refined sugar into certain States. For instance, refiners in Louisiana may market their sugars only in the States of Tennessee, Kentucky, Alabama, Mississippi, Louisiana, Arkansas, Oklahoma, Texas, Missouri, Illinois, Indiana, Ohio, and Florida west of the Apalachicola River. Shipments already made may be delivered within one month after the effective date of the Order, which is March 27, 1942.

2. M-55-c. Since the beet sugar processors have sufficient sugar to fill the requirements of consumers in the western part of the United States and to take care of local shortages which may develop in other zones, the beet sugar processors are not zoned; however, they are required to set aside 15% of their inventory each month, subject to the order of the Director of Industry Operations. This 15% will be used in relieving local shortages by an arrangement which will protect the processors against excess freight charges beyond their normal areas of distribution.

3. M-55-e. For the Month of April, 80% of the sugar used or resold during April 1941 shall be the maximum of purchases permitted by jobbers, wholesalers and manufacturing users.

4. The Proportionate-Share Determination for the 1942 crop has been officially issued and the effect is to confirm by an official document that there are no acreage restrictions for sugarcane growers in connection with the 1942 crop. Whatever acreage each grower harvests will be the basis for the conditional payments authorized under the Sugar Act.

# Supplementary Order M-55-c

CHAPTER IX—WAR PRODUCTION BOARD
Subchapter B—DIVISION OF INDUSTRY OPERATIONS
PART 1032—SUGAR

Pursuant to Order M-55, which this Order supplements:

(a) Primary Distributors of Beet Sugar are hereby required to set aside for shipment as ordered by the Director of Industry Operations 15% of the refined Direct-Consumption Sugar, derived from Sugar Beets, in their possession or control at any or all points on the effective date of this Order. Such Primary Distributors are further required to set aside at the end of each month for shipment and sale as the Director of Industry Operations may order 15% of their production during such month, after the effective date of this Order, unless the Direct of Industry Operations shall prescribe some greater or less percentage.

(b) Within fifteen (15) days after the effective date of this Order, the Primary Distributors affected thereby shall notify the War Production Board in writing of the location and amount of Direct-Consumption Sugar set aside by them pursuant to this Order. Within five (5) days after the end of each calendar month beginning with April each Primary Distributor affected by this Order shall similarly report to the Director of Industry Operations the amount and location of Direct-Consumption Sugar set aside by him out of production during each month.

(c) If, within sixty (60) days after receipt of notification as prescribed in Paragraph (b), the Director of Industry Operations shall not have instructed the Primary Distributor further with regard to the shipment and sale of such sugar or part thereof, such sugar shall be deemed released and may be disposed of or held by the Primary Distributor in any manner consistent with other laws and regulations of the War Production Board and the Office of Price Administration.

(d) This Order shall take effect immediately and unless sooner modified, amended, or revoked, shall continue in effect until December 31, 1942.

Issued this 27th day of March, 1942.

J. S. Knowlson
Director of Industry Operations.

# Supplementary Order M-55-d

CHAPTER IX—WAR PRODUCTION BOARD
Subchapter B—DIVISION OF INDUSTRY OPERATIONS
PART 1032—SUGAR

Pursuant to Order M-55, which this Order supplements:

(a) Definitions of Zones.

(1) "Zone 1" means Maine, New Hampshire, and Vermont.

(2)"Zone 2" means Massachusetts, Rhode Island, and Connecticut.

(3) "Zone 3" means New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, West Virginia, and the District of Columbia.

(4)"Zone 4" means North Carolina.

(5) "Zone 5" means South Carolina, Georgia, and Florida east of the Apalachicola River.

(6) "Zone 6" means Tennessee and Kentucky.

(7) "Zone 7" means Alabama, Mississippi, Louisiana, Arkansas, Oklahoma, Texas, Missouri, Illinois, Indiana, Ohio, and Florida west of the Apalachicola River.

(8)"Zone 8" means the balance of the continental United States excluding Alaska and the Canal Zone.

(b) Shipments permitted.

Until further Order of the Director of Industry Operations Direct-Consumption Sugar derived from sugar cane may be shipped or sold for shipment only to destinations within zones as follows:

(1) From points in Zones 1 and 2, only to points in Zones 1 and 2.
(2) From points in Zone 3, only to points in Zones, 2, 3, and 4
(3) From points in Zone 4 only to points in Zone 4.
(4) From points in Zone 5, only to points in Zones 4, 5 and 6.
(5) From points in Zone 6, only to point in Zone 6.
(6) From points in Zone 7, only to points in Zone 6 and 7.
(7) From points in Zone 8, only to points in Zone 8, and Texas, Oklahoma, Missouri, and Illinois.

(c) Sugar Shipped Before Date of Order.

Direct-Consumption Sugar refined by Primary Distributors in any of the zones set forth in paragraphs (a) and (b), and shipped to points outside the areas to which shipment is permitted by paragraph (b) prior to the effective date of this Order, but still owned or controlled by such Primary Distributors on such effective date, may be sold at or near the points to which they were shipped only within one month after the effective date of this Order.

(d) Other Restrictions.

Primary Distributors shall sell sugar equitably among their customers, and shall so far as possible not discriminate in favor of or against any area or class of customers open to them under this Order, provided however, that this Order shall not be construed to require any Primary Distributor to ship outside his normal trading area unless he is specifically so ordered by the Director of Industry Operations.

(e) Applicability of Order.

This order does not apply to raw, dry invert or liquid invert Direct-Consumption Sugar, or to soft Sugar in bulk or to confectioner's, brown, loaf, tablet, and other specialty Direct-Consumption Sugar, in one and two pound packages, or to Direct-Consumption Sugar refined or processed outside the continental United States.

(f) Effective Date and Termination.

This Order shall take effect immediately and unless sooner modified, amended, or revoked shall continue in effect until December 31, 1942.

Issued this 27th day of March, 1942.

J. S. Knowlson
Director of Industry Operations.

# Supplementary Order M-55-e

CHAPTER IX—WAR PRODUCTION BOARD
Subchapter B—DIVISION OF INDUSTRY OPERATIONS
PART 1032—DIRECT-CONSUMPTION SUGAR

1032.6 Supplementary Order No. M-55-e. (a) The Director of Industry Operations hereby determines that during the month of April, 1942, the quota of Direct-Consumption Sugar permitted Receivers under Paragraph (d) of Order M-55, as amended, shall

be a minimum practicable working inventory not exceeding 80% of use or resale during the base period of 1941 as prescribed by the said Order No. M-55.

(b) During the said month of April 1942, no person, other than a Receiver, using sugar in the manufacturer of any other product for resale, shall accept delivery of more Direct-Consumption Sugar than he would be permitted to accept if he were a Receiver, and no jobber or wholesaler shall sell or deliver Direct-Consumption Sugar to any person with knowledge or reason to believe that such person is prohibited from accepting delivery of such sugar by this paragraph. This paragraph does not apply to purchase or use of sugar for preparation of meals to be served in hotels or restaurants.

Issued this 27th day of March 1942.

J. S. Knowlson
Director of Industry Operations.

## Determination of Proportionate Shares for Farms in the Mainland Cane Sugar Area for the 1942 Crop

Determination of Proportionate Shares for Farms in the Mainland Cane Sugar Area For the 1942 Crop

Whereas, section 302 of the Sugar Act of 1937, as amended, provides in part as follows:

(a) The amount of sugar or liquid sugar with respect to which payment may be made shall be the amount of sugar or liquid sugar commercially recoverable, as determined by the Secretary, from the sugar beets or sugarcane grown on the farm and marketed (or processed by the producer) not in excess of the proportionate share for the farm, as determined by the Secretary, of the quantity of sugar beets or sugarcane for the extraction of sugar or liquid sugar required to be processed to enable the producing area in which the crop of sugar beets or sugarcane is grown to meet the quota (and provide a normal carry-over inventory) estimated by the Secretary for such area for the calendar year during which the larger part of the sugar or liquid sugar from such crop normally would be marketed.

(b) In determining the proportionate shares with respect to a farm, the Secretary may take into consideration the past production on the farm of sugar beets and sugarcane marketed (or processed) for the extraction of sugar or liquid sugar and the ability to produce such sugar beets or sugarcane, and the Secretary shall, insofar as practicable, protect the interests of new producers and small producers and the interests of producers who are cash tenants, share-tenants, adherent planters, or share-croppers;

And whereas, subsection (c) of section 301 of the said Act provides, as one of the conditions for payment to producers of sugar beets and sugarcane, as follows:

(c) That there shall not have been marketed (or processed) an amount (in terms of planted acreage, weight, or recoverable sugar content) of sugar beets or sugarcane grown on the farm and used for the production of sugar or liquid sugar to be marketed in, or so as to compete with or otherwise directly affect interstate or foreign commerce, in excess of the proportionate share for the farm, as determined by the Secretary pursuant to the provisions of section 302, of the total quantity of sugar beets or sugarcane required to be processed to enable the area in which such sugar beets or sugarcane are produced to meet the quota (and provide a normal carry-over inventory) as estimated by the Secretary for such area for the calendar year during which the larger part of the sugar or liquid sugar from such crop normally would be marketed;

Now, therefore, the following determination is hereby issued:

802.26d Proportionate shares of sugarcane for the mainland cane sugar area for the 1942 crop—(a) Farm proportionate share. The proportionate share of sugarcane for the 1942 crop for any farm in the mainland cane sugar area shall be the number of acres planted thereon for the production of sugarcane to be marketed( or processed by the producer) for the extraction of sugar or liquid sugar during the 1942 crop season.

(b) Tenant and sharecropper protection. The provision of this determination are subject to the following conditions:

(1) That no change shall have been made in the leasing or cropping agreements for the purpose of diverting to producers any payment to which tenants or sharecroppers would be entitled to their 1941 leasing or cropping agreements were in effect;

(2) That there shall have been no interference by any producer with any contracts heretofore entered into by tenants or sharecroppers for the sale of their sugarcane or their share of the sugarcane produced on the farm.

Done at Washington, D.C., this 24th day of March 1942. Witness my hand and the seal of the Department of Agriculture.

Claude R. Wickard, Secretary.

## Maximum Prices For Second-Hand Bags

Maximum prices for second-hand cloth bags are revised to conform to the provisions of the Emergency Price Control Act of 1942 in an amendment issued February 4th, to Price Schedule No. 55 by Leon Henderson, Administrator of the Office of Price Administration.

The amendment provides that beginning on February16, 1942, second-hand bags may not be sold at prices above the highest prices received by a seller during the period October 1-October 15, 1941. The emergency ceiling, imposed on December 16 as result of profiteering that followed the outbreak of war, based maximum prices on the period November 15-December 6.

Since the October 1-October 15 prices were generally lower than those of November 15-December 6, OPA delayed the effective date of the new ceiling until February 16 so that dealers and other sellers might dispose of any bags purchased at prices higher than those set in the new ceiling. However, the schedule provides that deliveries under contracts executed between February 3 and February 15, inclusive, must be completed by March 30, 1942. All new contracts made on and after February 16, of course, must comply with the new maximum prices.

"Second-hand bags" are re-defined by the amendment so as to make it clear that bags made of jute, sisal, gunny cloth, or other textile materials are covered in addition to bags made of burlap or cotton.

As revised, the schedule also liberalizes the method of determining prices if a seller made no sales of a particular type of bag during the base pricing period. In this event, it is now stated, a seller may charge a price in line with that received during the base period for related or similar types of bags. Originally, a seller was required to use as a maximum

price the "last sale" price of the same type of bag, even though no sales had been made for a considerable time previous. Only actual sales, contracts of sale, or deliveries can be used to determine maximum prices.

All persons who sold more than 1,000 second-hand bags during any month of 1941 were required to file with OPA on or before March 10, 1942, a list of all sales, contracts to sell, and deliveries made during the October 1-October 15, 1941, period, giving the date of sale, name and address of the purchaser, quantity of each type, size, weight, and grade of second-hand bags sold, together with the price received for each.

The amended schedule contains provisions for special applications by persons who made no sales or deliveries of any kind during the base period. OPA will advise them as to specific maximum prices for which they can sell. In addition, persons whose only transactions during the base period were deliveries made under contracts entered into before October 1, 1941, at prices below the market prices prevailing during the base period may make application for special consideration from the Office of Price Administration.

## An Essential Book For Sugar Chemists

The *Sugar Bulletin* is in receipt of a copy of "Physical and Chemical Methods of Sugar Analysis," a book of over 1300 pages, which is a treatise for use in research, technical and control laboratories. The authors are Dr. C. A. Browne, Ph. D., until recently Chief of the U. S. Bureau of Chemistry, and Dr. F. W. Zerban, Ph. D., Chemist in Charge of the N. Y. Sugar Trade Laboratory. Both Dr. Browne and Dr. Zerban were formerly research chemists at the Louisiana Sugar Experiment Station. "Physical and Chemical Methods of Sugar Analysis" is a revision of Dr. Browne's Handbook of Sugar Analysis," a standard authority, which was published in 1912 and has now been out of print about 10 years. It is a work of great scope and completeness and contains within its covers an enormous amount of data essential to sugar chemists. The price is $15.00 per copy and the publishers are John Wiley and Sons, New York City.

"Physical and Chemical Methods of Sugar Analysis" is dedicated by its authors, in a note printed on the fly sheet, to Dr. H. C. Prinsen-Geerligs of Amsterdam, Netherlands.

## 1942 Sugar Quota

(*Official Release*)

The Department of Agriculture announced on December 31st that 6,666,890 short tons, raw value, will be needed from the various sugar-producing areas supplying the continental U. S. in 1942 in order to meet the normal sugar requirements of consumers. However, since certain of the areas may be unable in 1942 to deliver the quantity of sugar ordinarily furnished by them, it is necessary to establish initial quotas totaling 8,032,074 tons, in order to make it possible to secure the required sugar from the other areas. The Sugar Act of 1937 requires the Secretary to establish quotas in December for the following calendar year and authorizes him to revise such quotas whenever necessary.

The initial 1942 quotas for the various areas with the 1942 comparative initial quotas are as follows:

| Areas | 1942 Quotas (short tons raw value) | 1941 Quotas (short tons raw value) |
|---|---|---|
| Continental Beet | 1,862.811 | 1,549,898 |
| Mainland Cane | 504,995 | 420,167 |
| Hawaii | 1,127,420 | 938,037 |
| Puerto Rico | 959,088 | 797,982 |
| Virgin Islands | 10,716 | 8,916 |
| Commonwealth of the Philippines | 1,237,764 | 1,006,931 |
| Cuba | 2,297,533 | 1,869,060 |
| Foreign countries other than Cuba | 31,747 | 25,826 |
| | 8,032,074 | 6,616,817 |

It is not anticipated at present that the Philippines will fill much, if any, of their 1942 quota, nor that Hawaii will meet its entire quota. Therefore, any part of the required 6,666,890 tons which those areas are unable to supply will have to be made up by sugar from other areas having sugar supplies in excess of their quotas. Officials pointed out, however, that the Western Hemisphere may be called upon to furnish the Allies with somewhat larger supplies of sugar in 1942 than in prior years.

On the basis of the recent sugar conservation order issued by the Office of Production Management, 1942 sugar distribution within this country will be limited to about 6,891,000 tons (the amount distributed in 1940) plus the supplies needed by the armed services of this country. The difference between this amount and the 6,666,890 tons could be made up from excess sugar stocks carried over into 1942.

It is estimated that sugar distribution in 1941 will total about 7,900,000 tons and that about half of the 1,000,000-ton increase over 1940 represents increased stocks held by wholesalers and retailers, and industrial, commercial and household users of sugar.

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

**LAMBORN & COMPANY, INC.**
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

**LE BOURGEOIS BROKERAGE CO.**
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
**HARRY L. LAWS & CO., INC.**
Brokers and Distributors
SUGAR and MOLASSES
**SUGAR FUTURES**
American Bank Building New Orleans, La.

**GAY, SULLIVAN & CO., INC.**
SUGAR
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

**STAUFFER, ESHLEMAN & CO., LTD.**
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
**CYANAMID**
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

**INDUSTRIAL LUBRICANTS**

BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
**STANDARD OIL CO. OF LA.**

FOR SUGAR CANE FINANCING
**STATE AGRICULTURAL CREDIT CORPORATION, INC.**
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

**AMERICAN MOLASSES CO.**
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LEGardeur Frank Youngman
**R. J. LEGARDEUR & COMPANY**
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

**PENICK & FORD, LTD., INCORPORATED**
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

**STANDARD SUPPLY AND HARDWARE CO., INC.**
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

**E. A. RAINOLD, INC.**
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

We stand for the encouragement of Home Industries as against foreign Competition

Vol. 20 NEW ORLEANS, LA., APRIL 15, 1942 No. 14

# War Furnishes The Evidence

*(By C. J. Bourg)*

The office of Price Administration issued a press release on March 31, 1942, explaining the reasons for establishing a maximum price of $5.60 for sugars processed by refiners in Pennsylvania, New York, New Jesery, and Massachusetts. We quote pertinent paragraphs as follows:

"OPA granted permission for the advance in the refined cane sugar price ceiling in the North Atlantic seaboard area to $5.60 per hundred pounds, following extensive analysis of the recent Tariff Commission report on refining cost studies. This covered operations of representative refiners located on the North Atlantic seaboard, South Atlantic seaboard, Gulf Coast and Pacific Coast.

"Refined sugar price increases are considered unnecessary in the South Atlantic and Gulf Coast areas, as costs do not necessitate a price higher than the $5.45 ceiling figure, OPA quarters pointed out.

"The cost survey indicates that West Coast refiners currently are operating at a loss under a $5.45 refined ceiling. *However, an advance in that area would be useless, as cane refiners could not take advantage of it in view of the heavy competition from refined beet sugar.* The California beet crop is more than sufficient for consumption needs of that area. With refined beet sugar selling at the $5.35 per hundred pound ceiling, a price above the present $5.45 refined cane ceiling would block cane refiners from selling on the West Coast. Thus, higher priced cane would, of necessity, be shipped to outside areas, with resulting freight absorption. Hence, OPA decided to confine the increase to the North Atlantic area."

For many years the Senators and Congressmen from sugar-producing States have urged the people of the United States to realize that the best insurance policy which American consumers have to guarantee a fair price and an adequate supply of sugar is a progressively increasing production of sugar in the continental United States. Congress has by its acts recognized this fact, subject to limitations. It has taken a war to bring from the United States Government a statement in substantiation of the contention of the domestic sugar industry and its spokemen in Congress.

We ask our readers to take careful note of the statement by the OPA that cane refiners on the West Coast could not take advantage of a higher ceiling on refined sugar, "in view of the heavy competition from refined beet sugar." This is recognized in a specific instance the fact which we have known and maintained for many years that the production of beet sugar and cane sugar in the continental United States protects the consumers of sugar from the higher prices which would be charged if there were not any continental sugar industry.

We sincerely and purposefully trust that the people of the United States will remember these experiences and developments of war when the times comes to determine the national policy of the post-war period.

## Amendment No. 1 to Revised Price Schedule No. 60

§1334.51 *Maximum prices for sales of direct-consumption sugars by primary distributors.* On and after March 31, 1942, regardless of any contract, agreement, lease, or other obligation, no primary distributor shall sell or deliver direct-consumption sugars, and no person shall buy or receive direct-consumption sugars in the course of trade or business from a primary distributor, at prices higher than the maximum prices set forth in this section; and no person shall agree, offer, solicit or attempt to do any of the foregoing. These maximum prices are gross prices before discounts of any nature are deducted and they include all prevailing commissions and all other charges.

(a) (1) The maximum basis price for fine granu-

Chemistry Library, Louisiana State University, University, La.

THE
SUGAR BULLETIN
414 Whitney Bldg., New Orleans
Marcel J. Voorhies, Editor
Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
Subscription Price, 50 Cents per Year.

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE
**President, W. C. Kemper, Franklin, La.**
1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

**EXECUTIVE COMMITTEE**
W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

lated sugar processed by cane sugar refineries in Pennsylvania, New York, New Jersey, and Massachusetts shall be $5.60 per hundred pounds f. o. b. United States seaboard cane sugar refinery nearest freightwise to point of delivery.

(2) The maximum basis price for fine granulated sugar processed by cane sugar refineries in all states other than those specified in paragraph (a) (1) of this section shall be $5.45 per one hundred pounds f. o. b. United States seaboard cane sugar refinery nearest freightwise to point of delivery.

(3) The maximum basis price for fine granulated beet sugar manufactured in the continental United States shall be $5.35 per one hundred pounds f. o. b. United States seaboard cane sugar refinery nearest freightwise to point of delivery.

(4) (i) The maximum basis price for fine granulated sugar from off-shore areas, domestic or foreign, shall be $5.40 per one hundred pounds duty-paid basis f. o. b. United States seaboard cane sugar refinery nearest freightwise to point of delivery.

(ii) The maximum basis price for turbinado, washed-white, or similar sugar for direct consumption from off-shore areas, domestic or foreign, shall be $5.20 per one hundred pounds duty-paid basis f. o. b. United States seaboard cane sugar refinery nearest freightwise to point of delivery.

(5) The maximum basis price for direct-consumption sugars other than those sugars provided for in paragraphs (a) (1), (a) (2), (a) (3), (a) (4), and (b) (1) of this section, processed from United States mainland sugar cane, including but not limited to turbinado, plantation white, and high-washed sugars, shall be $5.35 per one hundred pounds f. o. b. United States seaboard cane sugar refinery nearest freightwise to point of delivery.

(6) The respective maximum basis prices established in paragraphs (a) (1), (a) (2), (a) (3), (a) (4) (i), and (a) (5), of this section shall each be adjusted for grade and package differentials in accordance with the seller's differential therefor published or in effect one December 1, 1941.

(7) (i) Except as specifically provided in subdivisions (ii) and (iii) of this subparagraph (7), the maximum delivered price for each of the sugars provided for in paragraphs (a) (1), (a) (2), (a) (3), (a) (4), and (a) (5), respectively, of this section, shall be determined by adding to the applicable maximum basis price as specified in said subparagraphs (as adjusted for grades and packages) f. o. b. United States seaboard cane sugar refinery nearest freightwise to the point of delivery, the transportation charges per one hundred pounds on a shipment of identical quantity from such refinery to the point of delivery. Such refinery shall be that refinery from which the lowest established transportation rate applies to the point of delivery. Such transportation rate shall be based on the mode of transportation and routing employed by such refinery on December 1, 1941, in calculating the "freight application" or "selling prepay" to the point of delivery. If such mode of transportation and routing has been, or shall be, rendered unavailable by action of the United States Government, or any agency thereof, then such transportation rate shall be based on the available mode of transportation and routing resulting in the lowest transportation charge. Sugar is at its point of delivery within the meaning of this subdivision (i) when it has arrived for unloading at a siding or dock at or in the vicinity of the buyer's warehouse or place of business at or from which it is to be used or resold. In case the buyer actually takes delivery f. o. b. seller's refinery, the price paid to the seller plus the cost of transportation borne by the buyer shall not exceed the maximum delivered price as calculated in this subdivision.

(ii) Where the buyer's warehouse or place of business at or from which the sugar is to be used or resold is within a refinery city metropolitan area and the transportation to such place is performed by means of a motor vehicle owned, controlled, or hired by the seller, the maximum delivered price for each of the sugars provided for in paragraphs (a) (1), (a) (2), (a) (3), (a) (4), and (a) (5), respectively ,of this section, shall be determined by adding to the applicable maximum basis price as specified in said paragraphs (as adjusted for grades and packages) a delivery charge per one hundred pounds based on the cartage rates employed by the seller on December 1, 1941.

(iii) Where the transportation to the buyer's warehouse or place of business at or from which the sugar is to be used or resold is performed by means of a motor vehicle owned, controlled, or hired by the buyer, the point of delivery shall be the place at which the sugar is loaded on such vehicle. Where such point of delivery is within a refinery city metropolitan area, the maximum delivered price at such place for each of the sugars provided for in paragraphs (a) (1), (a) (2), (a)

(3), (a) (4), and (a) (5), respectively, of this section shall be the applicable maximum basis price as specifiied in said subparagraphs (as adjusted for grades and packages). Where such point of delivery is outside a refinery city metropolitan area, the maximum delivered price shall be calculated and determined under subdivision (i) of this subparagraph (7) using however, the point of delivery specified in this subdivision (iii). Where the transportation is to be performed by means of a motor vehicle owned, controlled, or hired by the buyer, no sale of sugar shall be made unless the seller shall have offered to sell and deliver the sugar at a price not in excess of the price as calculated and determined in sub-division (i) of this subparagraph (7) and the buyer shall have refused such offer. All such sales shall be invoiced, and the invoices shall state as separate items the shipping point of the sugar, the location of buyer's warehouse or place of business at or from which the sugars are to be directly used or resold, the price charged, the amount of transportation charges as calculated and determined in subdivision (i) of this subparagraph (7) and the fact that the seller offered to deliver at or at less than said maximum delivered price as calculated and determined in subdivision (i) of this subparagraph (7) and the buyer rejected said offer.

(b) (1) The maximum price for direct-consumption raw cane sugar of 96 degrees polarization, of domestic or foreign origin, shall be $4.60 per one hundred pounds United States mainland shipping point, including all taxes and duty.

(2) The maximum specified in paragraph (b) (1) of this section, shall be adjusted by making allowances per pound for each degree of polarization above or below 96 degrees (fractions of a degree in proportion) in accordance with the method customarily used prior to the effective date of Price Schedule No. 60.

§1334.52 *Maximum prices for sales or direct-consumption sugars at wholesale by persons other than primary distributors.* On and after March 31, 1942, regardless of any contract, agreement, lease, or other obligation no person shall sell or deliver direct-consumption sugars at wholesale, and no person shall buy or receive direct-consumption sugars as wholesale in the course of trade or business at prices higher than the maximum prices established by this section. These maximum prices are gross prices and include prevailing commissions, discounts, and all other charges.

(a) The basic maximum price shall be the highest price at which the seller sold such sugars of similar grade, package, and amount to a similar purchaser during either the period October 6, 1941, to October 11, 1941, inclusive, or the period December 1, 1941, to December 6, 1941, inclusive. The seller may select either period at his option. However, once having selected a period, the seller must use the period selected for all purposes of this section. The maximum price for sugars acquired subsequently at a higher net purchase cost shall be determined by adding to the basic maximum price the amount, if any, by which the said higher net purchase cost excceds the net purchase cost of the sugars upon which the basis maximum price was based, provided the seller has first sold his entire inventory of lower cost sugars, and provided further, in calculating said maximum prices, the amount by which any net purchase cost exceeds the maximum prices established by §1334.51 shall not be included. In determining the maximum price for a particular grade, the seller shall employ the differential for such grade which he used during the period selected by him. If he made no sale of such grade during the period selected by him, he shall employ the differential for such grade in accordance with the differential for grades and packages published or in effect during such period of the primary distributor from whom the seller purchased such sugar.

(b) These maximum prices shall include at least the same absorption of transportation costs, and other charges, and at least the same rendition of services, as were or would have been absorbed or rendered by the seller on comparable shipments to the same place of destination during the period selectetd by the seller as provided for in paragraph (a) of this section.

(c) In cases where a person makes sales of such sugars through more than one selling unit, other than salesmen making sales at uniform prices, each such unit shall be deemed to be a separate entity for the purpose of determining the maximum prices established by this section.

(d) In case a person made no sale of direct-consumption sugars during the period October 6, 1941, to October 11, 1941, inclusive, and the period December 1, 1941, to December 6, 1941, inclusive, then such person may sell such sugars at the market price prevailing on the date of sale for sugars of a similar grade, package, and amount to a similar purchaser: *Provided*, That (1) the seller submit to the Office of Price Administration a statement specifying as separate items the grade, package, and amount sold; the name, address, and type of purchaser; the price to be charged; and whether such price includes delivery to the purchaser's place of business; (2) such statement is submitted to and the price is approved by the Office of Price Administration prior to the delivery of the sugar sold.

§1334.61 *Provision with respect to direct-consumption sugars to be purchased or sold by Defense Supplies Corporation, or its designee or designees.* (a) In the case of direct-consumption sugars to be purchased by Defense Supplies Corporation, or its designee or designees, the price shall not exceed the maximum prices established by §1334.51; *Provided,* That where such maximum prices are below the seller's cost for such sugars to be sold, application may be made by Defense Supplies Corporation for the approval by the Administrator of a price in excess of the maximum prices established by §1334.51. Where the seller was not subject to the provisions of §1334.51 prior to March 31, 1942, references in said §1334.51 to the primary distributor's differentials for grades and packages and the primary distributor's cartage rates shall be construed to be the differentials for grades and packages, and the cartage rates of the primary distributor nearest freightwise to the seller.

(b) In the case of direct-consumption sugar to be sold by Defense Supplies Corporation, or its designee or designees, the price may not exceed the maximum prices established by §1334.51; *Provided,* That application may be made by Defense Supplies Corporation for the approval by the Administrator of a price in excess of the maximum prices established by §1334.51.

(c) With respect to any sale of direct-consumption sugars to or by Defense Supplies Corporation, or

its designee or designees, the contract or contracts may provide for the payment of an adjusted price not to exceed the maximum price in effect at the time of shipment.

§1334.60a. Effective dates of amendments. (a) Amendment No. 1 (§§1334.51, 1334.52, and 1334.61) to Revised Price Schedule No. 60 shall become effective on March 31, 1942. Until such date, Revised Price Schedule No. 60 continues in effect as if not amended by Amendment No. 1.

(Pub. Law 421, 77th Cong.)

Issued this 30th day of March 1942.

JOHN E. HAMM,
Acting Administrator.

# General Preference Order No. 54, As Amended March 27, 1942

**Part 1031—Molasses**

Section 1031.1 (General Preference Order No. M-54) is hereby amended to read as follows:

The fulfillment of requirements for the defense of the United States has created a shortage in the supply of Molasses for defense, for private account and for export; and the following Order is deemed necessary and appropriate in the public interest and to promote the national defense;

§1031.1 General Preference Order M-54—(a) Definitions. For the purposes of this Order:

(1) "Molasses" mean any molasses, sirup, sugar solution or any form of fermentative sugar including Hydrol (derived from sugar cane, sugar beets or corn) other than direct-consumption sugar as defined in General Preference Order No. M-55 As Amended January 24, 1942) or sugar intended for and used for manufacture into direct-consumption sugar. Blackstrap molasses is any final molasses produced in the manufacture of sugar from sugar cane or from the refining of raw sugar and includes all beet molasses produced in the manufacture of sugar from sugar beets. Invert molasses is any molasses made from sugar cane without extraction of sugars. Hydrol is corn sugar molasses. For the purpose of this Order one gallon of invert molasses is to be construed as 1½ gallons of blackstrap molasses and one gallon of Hydrol is to be construed as one gallon of blackstrap molasses.

(2) "Producer" means any person engaged in the production of Molasses and includes any person who has Molasses produced for him pursuant to toll agreement.

(3) "Importer" means any person who transports Molasses in any manner into the continental United States. Release from the bonded custody of the United States Bureau of Customs shall be deemed a transportation.

(4) "Primary Distributor" means any person, other than an Importer or a Producer, who sells Molasses which he has acquired (other than as Broker) from an Importer or a Producer.

(5) "Secondary Distributor" means any person, other than an Importer, Producer or Primary Distributor, who sells Molasses which he has acquired (other than as Broker) from some person other than an Importer or Producer.

(6) A person may, at the same time, be an Importer, a Producer, a Primary Distributor and a Secondary Distributor. His classification, in a particular case, will be determined by the source of the Molasses involved; i.e., with respect to Molasses imported, he will be an Importer, with respect to Molasses acquired from a Producer, he will be a Primary Distributor, etc.

(7) "Broker" means any person who buys and sells Molasses on a fee basis as agent either for the buyer or the seller or both.

(8) "Class 1 Purchaser" means any person who requires Molasses in the manufacture of any one or more of the following products:

(i) Insecticides.
(ii) Lactic Acid.
(iii) Graphite Paste.
(iv) Printing Rollers.
(v) Dye Stuffs.
(vi) Ink
(vii) Ephedrine.
(viii) Sugar for Human Consumption (Produced From Beet Molasses).
(ix) Denatured Rum for Flavoring.
(x) Biological and Pharmaceutical Products for Human and Veterinary Uses, and any person who requires Molasses for any one or more of the following purposes:
(xi) Dust Extraction.
(xii) Leather Tanning.

(9) "Class 2 Purchaser" means any person who requires Molasses in the manufacture (including custom grinding) of mixed feeds (including Molasses treated beet pulp).

(10) "Class 3 Purchaser" means any person who requires Molasses in the Manufacture of any one or more of the following products:

(i) Yeast.
(ii) Citric Acid.

(11) "Class 4 Purchaser" means any person who requires Molasses in the manufacture of vinegar and any person who requires Molasses for foundry purposes.

(12) "Class 5 Purchaser" means any person who requires Molasses in the manufacture (including blending and/or packaging) of any one or more of the following products:

(i) Molasses (Edible).
(ii) Sirup (Edible).

(13) "Class 6 Purchaser" means any person who requires Molasses in the manufacture of other products for human consumption (not specified above).

(14) "Class 7 Purchaser" means any person who requires Molasses for sale directly (without the intervention of any other handler) to persons who require the same for ensilage or direct feed.

(15) "Calendar Quarter" means the several three month periods of the year commencing January 1, April 1, July 1, and October 1.

(16) "Calendar Quarterly Supply" means a quantity of Molasses not in excess of the quantity used by a purchaser listed above during a corresponding Calendar Quarter in the twelve month period ended June 30, 1941. Purchasers shall determine a Calendar Quarterly Supply with respect to each use specified in the applicable subparagraph above. Quantity shall in all cases be computed on a blackstrap molasses basis.

(17) "30 Day Supply" means a quantity of Molasses not in excess of one-twelfth of the quantity used by a purchaser listed above during the twelve month period ended June 30, 1941. Purchasers shall determine a 30 Day Supply with respect to each use specified in the applicable subparagraphs above. Quantity shall in all cases be computed on a blackstrap molasses basis.

(18) "Calendar Year" means the twelve month

period commencing January 1 and ending December 31.

(19) "Yearly Supply" means a quantity of Molasses not in excess of the quantity used by a purchaser listed above during the twelve month period ended June 30, 1941. Purchasers shall determine a Yearly Supply with respect to each use specified in the applicable subparagraph above. Quantity shall in all cases be computed on a blackstrap molasses basis.

(b) Applicability of Priorities Regulation No. I. This Order and all transactions affected thereby are subject to the provisions of Priorities Regulation No. 1, as amended from time to time, except to the extent that any provisions hereof may be inconsistent therewith, in which case the provisions of this Order shall govern.

(c) Restrictions on deliveries. Anything in Priorities Regulation No. 1 to the contrary notwithstanding:

(1) No Class 1, 2, 3, 4, 5, 6 or 7 Purchaser shall, during any Calendar Quarter (Calendar Year in the case of a Class 3 or 5 Purchaser), accept deliveries of Molasses in excess of the quantity set forth below less any quantity in excess of a 30 Day Supply on hand on the first day of the Calendar Quarter (Calendar Year in the case of a Class 3 or 5 Purchaser) in which delivery is to be made:

(i) Class 1 Purchaser—during any Calendar Quarter, 100% of a Calendar Quarterly Supply.
thereafter, 50% of a Calendar Quarterly Supply.

(ii) Class 2 Purchaser—during the Calendar Quarter commencing January, 1942, 55% of a Calendar Quarterly Supply; during any Calendar Quarter thereafter, 50% of a Calendar Quarterly Supply.

(iii) Class 3 Purchaser—during a Calendar Year, 110% of a Yearly Supply.

(iv) Class 4 Purchaser—during any Calendar Quarter, 110% of a Calendar Quarterly Supply.

(v) Class 5 Purchaser—during a Calendar Year, 100% of a Yearly Supply.

(vi) Class 6 Purchaser—during any Calendar Quarter, 100% of a Calendar Quarterly Supply.

(vii) Class 7 Purchaser—during any Calendar Quarter, 100% of a Calendar Quarterly Supply.

(2) Prior to Delivery of Molasses, within the limitations of subparagraph (c) (1) hereof, the prospective deliveree, if he be a Class 1, 2, 4, 6 or 7 Purchaser, shall submit to the deliveror a certificate in substantially the following form, properly filled out and manually signed by a duly authorized official:

The delivery, in the Calendar Quarter ended , of gallons of Molasses (blackstrap molasses basis), in connection with which this certificate is furnished, will not, taking into consideration Molasses received and to be received during the same Calendar Quarter from all sources and inventory on hand on the first day of such Calendar Quarter, be in excess of per cent of a Calendar Quarterly Supply to which the undersigned, as a Class Purchaser, is entitled pursuant to General Preference Order No. M-54, amended, with the terms of which Order the undersigned is familiar.

Dated:

(Name of purchaser)

By

(Duly authorized official)

Prior to delivery of Molasses, within the limitations of subparagraph (c) (1) hereof, the prospective deliveree, if he be a Class 3 or 5 Purchaser, shall submit to the deliveror a certificate in substantially the following form, properly filled out and manually signed by a duly authorized official:

The delivery of gallons of Molasses (blackstrap molasses basis), in connection with which this certificate is furnished, will not, taking into consideration Molasses received and to be received during this Calendar Year from all sources and inventory on hand on the first day of this Calendar Year, be in excess of per cent of a Yearly Supply to which the undersigned, as a Class Purchaser, is entitled pursuant to General Preference No. M-54, amended, with the terms of which Order the undersigned is familiar.

Dated:

(Name of purchaser)

By

(Duly authorized official)

(3) No person shall knowingly deliver Molasses to any Class 1, 2, 3, 4, 5, 6 or 7 Purchaser in violation of the terms of subparagraphs (c) (1) and (2) hereof.

(4) Except as otherwise provided in paragraph (d) hereof, on and after January 1, 1942, no deliveries of Molasses shall be made by any Producer, Primary Distributor, or Importer unless the same shall have been specifically authorized by the Director of Operations; and no person shall accept delivery of Molasses if such delivery would be made in violation of the foregoing clause. At the beginning of each Calendar Quarter the Director of Industry Operations will issue to all Producers, Primary Distributors and Importers specific directions covering deliveries of Molasses which may be made by such Producers, Primary Distributors and Importers during such Calendar Quarter. Such directions will be primarly to insure the satisfaction of all defense requirements and to provide an adequate supply for essential civilian uses and they may be made at the discretion of the Director of Industry Operations without regard to any preference rating assigned to particular contracts or orders.

(d) Unrestricted deliveries. Subject to the provisions of Priorities Regulation No. 1, amended, (and more particularly the inventory provisions thereof) and paragraphs (f) and (g) hereof, the following deliveries of Molasses shall not be subject to the provisions of paragraph (c) (4) hereof:

(1) Within the limitations of subparagraphs (c) (1) and (2) hereof, deliveries to purchaser specified in paragraph (a) hereof.

(2) Deliveries to Secondary Distributors for purposes of resale.

(3) Deliveries by a Class 7 Purchaser (of Molasses to which he is entitled pursuant to subparagraph (c) (1) (vii) hereof) to persons who require Molasses for ensilage or direct feed. Such deliveries should be made as equitably as possible among the persons requiring Molasses in the area which such Class 7 Purchaser serves.

(4) Deliveries of any one of the products specified in subparagraph (a) (12) hereof which after manufacture (including blending and/or packaging) fall within the definition of Molasses.

(5) Deliveries originating, completed and for use outside of the continental United States.

(6) Deliveries of an Importer originating outside of the continental United States.

(e) Restrictions on consumption. Unless otherwise authorized by the Director of Industry Operations,

no purchaser specified in paragraph (a) hereof shall, during any Calendar Quarter commencing with the month of January, 1942, use or consume more Molasses:

(1) Than he would be permitted to receive during such Calendar Quarter, in the case of a Class 1, 2, 4, 6 or 7 Purchaser (assuming that such purchaser had no Molasses on hand on the first day of the Calendar Quarter).

(2) Than 110% of a Calendar Quarterly Supply, in the case of a Class 3 Purchaser.

(3) Than a Calendar Quarterly Supply, in the case of a Class 5 Purchaser.

(f) Restrictions with respect to beverage spirits. Except as may be otherwise provided by the Director of Industry Operations, after January 15, 1942, no person shall deliver, use, or accept delivery of Molasses for the manufacture of beverage spirits.

(g) Restrictions on export. No Molasses shall be exported by any person except upon express authorization of the Director of Industry Operations.

(h) Intra-company transactions. The prohibitions or restrictions contained in this Order with respect to deliveries shall, in the absence of a contrary direction, apply not only to deliveries to other persons, including affiliates and subsidiaries, but also to deliveries from one branch, division or section of the same or any other enterprise owned or controlled by the same person.

(i) Prior authorizations. Specific mail or telegraphic authorizations heretofore issued by the Director of Industry Operations by way of relief from the provisions of this Order as it existed prior to this Amendment shall not be prejudiced or in any manner affected hereby.

(j) Reports. Reports shall be made at such times, on such forms and with respect to such matters as shall be perscribed by the Chemical Branch of the War Production Board.

(k) Notification of customers. Producers, Distributors and Importers shall, as soon as practicable, notify each of their regular customers of the requirements of this Order, but the failure to give such notice shall not excuse any person from the obligation of complying with the terms of this Order.

(l) Violations or false statement. Any person who violates this Order or who wilfully falsifies any records which he is required to keep by the terms of this Order, or by the Director of Industry Operations, or otherwise wilfully furnishes false information to the Director of Industry Operations or to the War Production Board may be deprived of priorities assistance or may be prohibited by the Director of Industry Operations from obtaining further deliveries of materials subject to allocation. The Director of Industry Operations may also take any other action deemed appropriate, including the making of a recommendation for prosecution under section 35 (A) of the Criminal Code (18 U. S. C. 80).

(m) Appeals. Any person affected by this Order who considers that compliance therewith would work an exceptional and unreasonable hardship upon him, or that it would result in a degree of unemployment which would be unreasonably disproportionate compared with the amount of Molasses conserved, or that compliance with this Order would disrupt or impair a program of conversion from non-defense to defense work, may appeal to the War Production Board, Reference: M-54, attention Chemicals Branch, setting forth the pertinent facts and the reason he considers he is entitled to relief. The Director of Industry Operations may thereupon take such action as he deems appropriate.

(n) Effective date. This Order shall take effect immediately and shall continue in effect until revoked by the Director of Industry Operations. (P.D. Reg. 1, 6 F.R. 6680; W.P.B. Reg. 1, Jan. 26, 1942, 7 F.R. 561, E.O. 9024, Jan. 16, 1942, 7 F.R. 329; E.O. 9040, Jan. 24, 1942, 7 F.R. 527; sec. 2(a), Pub. Law 671, 7th Cong., as amended by Pub. Law 89, 77th Cong.)

J. S. KNOWLSON,
Director of Industry Operations.

## Season Average Prices

April 4, 1942

To: Louisiana Sugar Mills
Subject: Compiled List of Growers

The season's average price of raw sugar has been determined to be 3.61208c per pound, which under the provisions of the determination of fair and reasonable prices for the 1941 crop of sugarcane fixes the price to be paid for standard cane to producers who agreed to a settlement based on the simple average of the weekly quotations of 90° raw sugar for the weeks from Friday, October 17, 1941 to April 2, 1942 at $3,661.

Likewise the season's average price of blackstrap molasses has been determined to be 16.18625c per gallon. The determination of fair and reasonable prices also provides that a molasses bonus shall be paid on each ton of sugarcane and that such bonus, for those processors who had not sold in excess of one-half of the blackstrap molasses of the 1941 crop at an established price, shall be computed by taking one-half of the excess of the average price per gallon of blackstrap molasses (16.18625c) over 8 cents and multiplying the product by 6.5. Therefore, the price to be paid per actual ton of cane by those processors will be 16.18625c minus 8.00000 divided by 2 times 6.5 equals 26.605 per ton.

Any processor who prior to October 4, 1941, had sold in excess of one-half of the blackstrap molasses of the 1941 crop at an established price provided he announced the price terms of such sale to growers served by him, may substitute for the season's average price, the price actually realized by him, and any quantity unsold as of April 2 is to be valued at the season's average price. Any processor taking advantage of this provision shall fully explain the method used in arriving at the bonus factor used by him.

Section 301(d) of the Sugar Act of 1937, approved September 1, 1937, as amended, provides as one of the conditions for payment to producers of sugar beets and sugarcane as follows:

> "That the producer on the farm who is also, directly or indirectly, a processor of sugar beets or sugarcane, as may be determined by the Secretary, shall have paid, or contracted to pay under either purchase or toll agreements, for any sugar beets or sugarcane grown by other producers and processed by him at rates not less than those that may be determined by the Secretary to be fair and reasonable after investigation and due notice and opportunity for public hearing".

In order that it may be determined whether producers who are also processors of sugarcane for sugar have complied with the determination of fair and reasonable prices for the 1941 crop, you are requested to prepare and mail to this office not later than April 20, 1942 form LS-108, Compiled List of

Growers delivering sugarcane for sugar to your factory during the 1941 crop. If you agreed to settle with your growers on the basis of the season's average price, the amount to be shown in the column headed "Total Due Basis of Price" shall equal the number of standard tons multiplied by $3,661.

If you agreed to settle with your growers for sugarcane on the basis of the average of the weekly quotations for the week in which such sugarcane was delivered, the above mentioned column should show the total amount paid on that basis. If some of your growers were settled with on the season's average and some on the weekly average, the basis of payment should be indicated and growers paid on the same basis should be grouped together on the same sheets.

Only amounts deducted because of decreased boiling house efficiency on account of frozen cane should be shown in the column headed "Allowable Deductions". If no such loss was incurred, the column should be left blank. If no such deductions are shown in the "Allowable Deductions" column, the column headed "Net Amount Due" may also be left blank. When these columns are not used for deductions, either may be used to show the amount paid on account of the molasses bonus, and in the event the column is used for that purpose, the factor used for determining the amount of molasses bonus should be inserted at the top of the column. In the event such columns are used for allowable deductions, any other column not used may be employed or an extra column may be attached to the original sheet to show the amount paid.

The names of growers and the amounts paid for "Java Formula" sugarcane should be shown on a separate sheet.

Sugarcane delivered by producers who are also processors, or company owned cane, should be clearly indicated either by footnote or by separate list. Cooperative sugar mills should identify members and non-members by footnote or by submitting separate lists.

Your particular attention is called to the instructions and certification by the bookkeeper and the manager given on the reverse side of Form LS-108. These forms should be prepared in duplicate, the original to be sent to Mr. G. J. Durbin, Administrative Officer in Charge, Agricultural Adjustment Administration, University Station, Baton Rouge, Louisiana, not later than April 20, 1942.

G. J. Durbin
Administrative Officer in Charge

## Important Meeting Announced

The regular spring meeting of the Agricultural Section of the Louisiana Sugar Cane Technologists Association will be held at 9:30 A.M., Tuesday, April 28th, at the U. S. D. A. Building at the Houma Federal Experiment Station at Houma, La.

The program will consist, among other interesting items, of:

(1) A report by the Committee on ditching machines.

(2) A report by the Committee on weed control.

(3) A report by the Committee on harvesting machines.

(4) A report on the use of liquid fertilizer.

All sugar cane growers are invited and urged to attend.

**PAUL, RICE & LEVY**
INCORPORATED
**Wholesale**
**INDUSTRIAL, MILL & MARINE SUPPLIES**
Day, Ra. 6123 Night, Fr. 2019
**501-505 Poydras St.**
**New Orleans, - - La.**
**O I C VALVES**
**GUILD & GARRISON PUMPS**
**INTERNATIONAL INDUSTRIAL PAINTS**
**CHESTERTON PACKING**
**K-TING MANILA ROPE**
**CONSOL OILS**
**VULCAN SOOT BLOWERS**

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

LAMBORN & COMPANY, INC.
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

LE BOURGEOIS BROKERAGE CO.
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
HARRY L. LAWS & CO., INC.
Brokers and Distributors
SUGAR and MOLASSES
SUGAR FUTURES
American Bank Building New Orleans, La.

GAY, SULLIVAN & CO., INC.
SUGAR
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

STAUFFER, ESHLEMAN & CO., LTD.
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
CYANAMID
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

INDUSTRIAL LUBRICANTS

BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
STANDARD OIL CO. OF LA.

FOR SUGAR CANE FINANCING
STATE AGRICULTURAL CREDIT CORPORATION, INC.
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

AMERICAN MOLASSES CO.
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LEGardeur Frank Youngman
R. J. LEGARDEUR & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

PENICK & FORD, LTD., INCORPORATED
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

STANDARD SUPPLY AND
HARDWARE CO., INC.
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

E. A. RAINOLD, INC.
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

La. State University, La.

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 20 NEW ORLEANS, LA., MAY 1, 1942 No. 15

# Sugar Rationing

*(By C. J. Bourg)*

Rationing Order No. 3, which sets forth in detail the regulations for the sugar rationing program to individual consumers and trade users, as well as the sugar quotas allowed to all forms of industrial and institutional users, has been issued by the Office of Price Administration, acting under the authority of War Production Board Directive 1E, which transferred to the Office of Price Administration the authority to ration sugar.

Consumers, who will register in elementary schools throughout the country on May 4, 5, 6, or 7, will be able to purchase one pound of sugar with each one of the first four stamps in their War Ration Books.

Restaurants and other food services will be able to obtain fifty per cent of the amount of sugar used during the corresponding month last year, or the amount used during March, 1942, while bakers, manufacturers of confectionery, ice cream, dairy products, preserves bottled beverages, desserts and other specialties will be entitled to an allotment of 70 per cent of past use.

Schedule B of the Ration Order sets forth the following monthly allotment percentages for institutional and industrial users:

| Use | Percentage of sugar base |
|---|---|
| (a) Meals or food services | 50 |
| (b) Bread | 70 |
| (c) Other bakery products | 70 |
| (d) Cereal products, batters, mixes | 70 |
| (e) Confectionery, candy, choclate, chewing gum, cocoa | 70 |
| (f) Ice cream ices, sherberts, frozen custards | 70 |
| (g) Other dairy products, condensed milk, cheese, etc. | 70 |
| (h) Preserves, jams, jellies, fruit butters | 70 |
| (j) Production of bottled beverages, flavoring extracts and syrups | 70 |
| (k) Specialties: Desserts, puddings, drink mixes, pickles, table syrups, mince meat, catsup, chili sauce, salad dressing, soups, tomato sauces | 70 |
| (m) Non food products, drugs and medicines, soaps, tobacco, insecticides, adhesives, leather | 70 |
| (n) Other | 70 |

Before issuing sugar purchase certificates registrars are required to deduct from the provisional allowance or allotment the quantity of sugar in the possession of the applicant. Present inventory is defined in the Order as "the aggregate of all sugar in the possession of, or intended to be used by, the registering unit, to which, at the time of registration, the owner of the registering unit has title or holds documents of title, or which was in transit or stored for delivery to the registering unit and out of the possession of the vendor of the registering unit prior to April 28th, 1942.

Under the regulations, one adult member of each family unit should register and apply for War Ration Book One for all the members of the family, including those temporarily absent or confined to an institution during the registration period.

Consumers who did not receive a ration book at the time of registration because of ownership of a quantity of sugar in excess of six pounds will receive their ration books by applying to their local boards, but only after "the commencement of the latest ration periods during which stamps become valid having a weight value equal to the excess sugar supply owned on May 4, 1942."

Efforts have been made by the Office of Price Administration not to disturb the traditional arrangement of those growers of sugarcane or beets who have in the past taken part payment in the form of refined sugar for the crops sold to primary distributors for processing. Such growers may apply to their local rationing boards for sugar purchase certificates authorizing them to take delivery of a maximum of 25 pounds for each member of a family

THE SUGAR BULLETIN

414 Whitney Bldg., New Orleans

Marcel J. Voorhies, Editor

Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
Subscription Price, 50 Cents per Year.

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE

President, W. C. Kemper, Franklin, La.

1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

EXECUTIVE COMMITTEE

W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

unit. They must, however, surrender their war ration books to the local rationing board.

In the case of consumers who normally buy a sack of sugar, they will definitely not be considered hoarders. All such a person has to do is to register and declare the amount of sugar he has at home. Such quantity of sugar will then be figured out on the basis of the ration of one-half pound per week per person in the household, and he will not be eligible to get a ration book until the period has expired during which the excess sugar supply can be consumed within the ration. The consumer should be very careful not to permit the family to consume more than the ration, otherwise there will be a time towards the end of the period when he will have no sugar left and will not be eligible to obtain more.

Industrial and institutional users of sugar, who register at high schools on April 28 and 29, will receive either a provisional allowance or an allotment to cover their sugar needs from the date of registration till June 30, depending on the products for which the sugar is used.

Wholesale and retail establishments dealing with sugar are prohibited from delivering sugar and from accepting delivery of sugar without surrender of sugar purchase certificates or sugar rationing stamps on or after April 28, regardless of any contract, agreement or commitment even if made before rationing, according to the sugar rationing order. Also, no wholesaler or retailer may either accept delivery of sugar or make delivery until it has been registered.

Under the regulations retailers and wholesalers will be permitted to obtain a working inventory of sugar, which is called "allowable inventory." The allowable inventory of a retailer will be computed on the basis of one pound of sugar for each dealer of gross sales of all meats, groceries, fruits, vegetables, and similar products made during the week ending April 25, 1942, or one-fourth of the sugar delivered to the registering unit during the month of November, 1941, whichever is smaller. The allowable inventory of a wholesaler will be computed by dividing the amount of sugar delivered to the registering unit in 1941 by twice the number of months it made deliveries of sugar during that year, and by adding thereto the quantity of sugar equal to the shipping unit by which the dealer customarily took deliveries of sugar at about December 1, 1941.

Establishments whose present inventory exceeds the allowable inventory are not entitled to sugar purchase certificates at the time of registration, and they must surrender to local boards for cancellation stamps or certificates equal to their excess inventory before they can accept new deliveries of sugar.

Wholesale establishments must keep records of all sugar received by them and of all sugar delivered by them to retailers. Retailers must likewise keep records of all sugar received by them, and must make the records available for inspection by the Office of Price Administration.

A primary distributor may deliver sugar on and after April 28 without interruption, but only upon the surrender of stamps or sugar purchase certificates.

A primary distributor is defined as "any person who manufactures sugar or the agent of any such person, or any person who delivers sugar to the continental United States from offshore areas or any person who takes such delivery or the agent of any such person who makes or takes such delivery. The term "agent" shall be deemed to include a broker, factor, commission merchant, or a person who takes title but actually performs functions commonly performed by agents, brokers, factors, or commission merchants.

A primary distributor must keep at his principal business office records of all sugar delivered by him, "the persons to whom such deliveries were made and the amounts thereof, the serial number of all certificates received, the weight value of such certificates, and the amount of sugar delivered against them," the Order states.

New establishments, including those which commenced operations subsequent to the effective date of the order, may petition their local boards for registration and for sugar purchase certificates. While local boards make recommendations with regard to the action to be taken, the final decisions on such petition will be made by the State rationing directors, to whom petitions and all supplementary information requested by the local board must be submitted within ten days after filing.

Under the regulations certificates or stamps may be transferred only upon an order to receive sugar, and all other transfers are prohibited. Consumers

who use less sugar than they are allowed to purchase, may not give their stamps to friends.

Each stamp is valid only during the ration period assigned to it. A registering unit which has received sugar rationing stamps may use them only within ten days of the close of the period during which the stamps were valid. A certificate authorizes a person to whom it was issued to take delivery within sixty days from the date of the certificate, and it authorizes a primary distributor or wholesaler to whom it has been surrendered to make a delivery of sugar within thirty days from the date of the last endorsement on the reverse side of the certificate.

Retailers receiving stamps from consumers must paste the stamps on a card provided by the Office of Price Administration or upon a similar card containing room for 100 stamps. Only stamps bearing the same number may be affixed to the card.

A registering unit surrendering a card filled with sugar rationing stamps in order to obtain sugar must write across the face of the card its name and address as well as the name and address of the registering unit to whom the card is being surrendered. Wholesalers who deliver sugar in exchange for cards must surrender them to the local rationing board having jurisdiction within their areas within ten days after receiving the cards, and sugar purchase certificates will be issued to them equal in value to the quantity of sugar.

"A registering unit whose sugar is destroyed, stolen or spoiled may apply to and obtain from the board a certificate authorizing it to take delivery of an amount of sugar equal to the amount destroyed, stolen or spoiled," the regulations provide.

A mutilated certificate is valid only if more than one half remains legible and if the remaining portion shows clearly the date when the certificate was issued, its weight value, and the name of the holder. A rationing stamp which has been mutilated remains valid in the hands of a consumer only if more than one half is still attached to the War Ration Book.

Provisions are made in the sugar rationing regulations for petitioning for an adjustment of the base, allotment or of the allowable inventory. Such a petition must be filed with the board with which the unit is registered and must be made on a special form provided by OPA, known as "Special Purpose Application." Local boards do not decide on such petitions, but, after stating its recommendation with regard to the action to be taken, the board must send the petition with all the substantiating evidence to the State Rationing Director.

Registering units may also appeal to the State Director against an adverse decision by local boards, but the appeal must be filed with the local board within ten days after the decision.

"Rationing officials as well as industrial and trade users of sugar should study the regulations very carefully", OPA officials emphasized. "The regulations cover a vast amount of ground, and no abridged statement can be satisfactory. Careful study will show that the regulations will answer a great number of questions which will arise under the sugar rationing program."

The Rationing Order lays down severe penalties for violators of the regulations.

We offer this advice to all citizens in connection with the rationing of sugar: Register; declare your sugar supply on hand; ask the registering officials all questions which seriously bother you. They have full instructions and copies of Rationing Order No. 3. They are in a position to tell you what to do and what not to do. If you are a distributor, a manufacturing user, a wholesaler, or a retailer, then you should obtain a copy of Rationing Order No. 3 and study the provisions carefully which affect you and your business. The order is very comprehensive and appears to anticipate practically every possible question which may arise.

---

LOUISIANA STATE UNIVERSITY
AND
AGRICULTURAL AND MECHANICAL COLLEGE
UNIVERSITY, LA.

April 16, 1942

Mr. Marcel Voorhies
Whitney Building
New Orleans, Louisiana
Dear Mr. Voorhies:

In reply to your request of a recent date for information pertaining to the work we are attempting to carry on in the sugarcane area, I submit the following information:

A study of the chemical and physical characteristics and their relation to yields is being made on the soils of the sugarcane belt with the intention of determining optimum fertility levels for the various soil types occurring in this area. In conjunction with this study, field experiments are being carried on to measure the response of sugarcane to different amounts of the various nutrient elements and combinations of the elements.

After the above mentioned information has been obtained and correlated, it will be possible to analyze a soil from the sugarcane area and determine if it is at the optimum fertility level, if the fertility level of a soil is too high, or if the soil is low in fertility. Then the kinds of fertilizer or other modifications needed can be recommended with greater certainty than is now possible with the limited amount of information available.

Eleven fertilizer experiments are being conducted this year in cooperation with county agents and planters in seven parishes. This work is now limited to the areas showing the greatest fertility problems due to the shortage of personnel and funds.

Considerable interest has been created in every locality in which we have worked. The problems found in the soils of the sugar belt have far exceeded our present facilities. To adequately take care of the work needed on soil fertility and the physical conditions of the soils in the sugarcane area would require a further expenditure of funds.

If any additional information is needed on this subject I will do my best to get it for you. Hoping to see you in the near future, I am

Very truly yours

Rufus K. Walker
Assistant Agronomist

# Sugar and Blackstrap Prices 1941-42 Season

*From the records of the Cane Products Trade Association, Inc.*

| Date | N. O. Sugar | Weekly Average | N. O. B'strap | Weekly Average |
|---|---|---|---|---|
| Oct. 17 | 3.48 | | 12½ | |
| 18 | 3.48 | | 12½ | |
| 19 | Sunday | | | |
| 20 | 3.48 | | 12½ | |
| 21 | 3.48 | | 12½ | |
| 22 | 3.48 | | 13 | |
| 23 | 3.48 | 3.48 | 13 | 12.67 |
| 24 | 3.48 | | 12½ | |
| 25 | 3.48 | | 12½ | |
| 26 | Sunday | | | |
| 27 | 3.48 | | 12½ | |
| 28 | 3.48 | | 13 | |
| 29 | 3.48 | | 13 | |
| 30 | 3.48 | 3.48 | 13 | 12.75 |
| 31 | 3.48 | | 13 | |
| Nov. 1 | 3.48 | | 13 | |
| 2 | Sunday | | | |
| 3 | 3.48 | | 13 | |
| 4 | no market | | | |
| 5 | 3.48 | | 13 | |
| 6 | 3.48 | 3.48 | 13 | 13.00 |
| 7 | 3.48 | | 13 | |
| 8 | 3.48 | | 13 | |
| 9 | Sunday | | | |
| 10 | 3.48 | | 13 | |
| 11 | no market | | | |
| 12 | 3.48 | | 13 | |
| 13 | 3.48 | 3.48 | 13 | 13.00 |
| 14 | 3.48 | | 13¼ | |
| 15 | 13.48 | | 13¼ | |
| 16 | Sunday | | | |
| 17 | 3.48 | | 13¼ | |
| 18 | 3.48 | | 13¼ | |
| 19 | 3.48 | | 14 | |
| 20 | no market | 3.48 | | 13.80 |
| 21 | 3.48 | | 14 | |
| 22 | 3.48 | | 14 | |
| 23 | Sunday | | | |
| 24 | 3.48 | | 14 | |
| 25 | 3.48 | | 14 | |
| 26 | 3.48 | | 14 | |
| 27 | 3.48 | 3.48 | 14 | 14.00 |
| 28 | 3.48 | | 14 | |
| 29 | 3.48 | | 15 | |
| 30 | Sunday | | | |
| Dec. 1 | 3.48 | | 15 | |
| 2 | 3.48 | | 15 | |
| 3 | 3.48 | | 15 | |
| 4 | 3.48 | 3.48 | 15 | 14.83 |
| 5 | 3.48 | | 15 | |
| 6 | 3.48 | | 15 | |
| 7 | Sunday | | | |
| 8 | 3.48 | | 15 | |
| 9 | 3.48 | | 15 | |
| 10 | 3.48 | | 15 | |
| 11 | 3.48 | 3.48 | 15 | 15.00 |
| 12 | 3.48 | | 15 | |
| 13 | 3.48 | | 15 | |
| 14 | Sunday | | | |
| 15 | 3.48 | | 15 | |
| 16 | 3.48 | | 15 | |
| 17 | 3.48 | | 15 | |
| 18 | 3.48 | 3.48 | 16½ | 15.25 |
| 19 | 3.48 | | 16½ | |
| 20 | 3.48 | | 16½ | |
| 21 | Sunday | | | |
| 22 | 3.48 | | 16½ | |
| 23 | 3.48 | | 16½ | |
| 24 | 3.48 | | 16½ | |
| 25 | no market | 3.48 | | 16.50 |
| 26 | 3.48 | | 16½ | |
| 27 | 3.48 | | 16½ | |
| 28 | Sunday | | | |
| 29 | 3.48 | | 16½ | |
| 30 | 3.48 | | 16½ | |
| 31 | 3.48 | | 16½ | |
| Jan. 1 | no market | 3.48 | | 16.50 |
| 2 | 3.48 | | 16½ | |
| 3 | 3.48 | | 16½ | |
| 4 | Sunday | | | |
| 5 | 3.73 | | 16½ | |
| 6 | 3.73 | | 16½ | |
| 7 | 3.73 | | 18 | |
| 8 | 3.73 | 3.65 | 18 | 17.00 |
| 9 | 3.73 | | 18 | |
| 10 | 3.73 | | 18 | |
| 11 | Sunday | | | |
| 12 | 3.73 | | 18 | |
| 13 | 3.73 | | 18 | |
| 14 | 3.73 | | 18 | |
| 15 | 3.73 | 3.73 | 18 | 18.00 |
| Jan. 16 | 3.73 | | 18 | |
| 17 | 3.73 | | 18 | |
| 18 | Sunday | | | |
| 19 | 3.73 | | 18 | |
| 20 | 3.73 | | 18 | |
| 21 | 3.73 | | 18 | |
| 22 | 3.73 | 3.73 | 18 | 18.00 |
| 23 | 3.73 | | 18 | |
| 24 | 3.73 | | 18 | |
| 25 | Sunday | | | |
| 26 | 3.73 | | 18 | |
| 27 | 3.73 | | 18 | |
| 28 | 3.73 | | 18 | |
| 29 | 3.73 | 3.73 | 18 | 18.00 |
| 30 | 3.73 | | 18 | |
| 31 | 3.73 | | 18 | |
| Feb. 1 | Sunday | | | |
| 2 | 3.73 | | 18 | |
| 3 | 3.73 | | 18 | |
| 4 | 3.73 | | 18 | |
| 5 | 3.73 | 3.73 | 18 | 18.00 |
| 6 | 3.73 | | 18 | |
| 7 | 3.73 | | 18 | |
| 8 | Sunday | | | |
| 9 | 3.73 | | 18 | |
| 10 | 3.73 | | 18 | |
| 11 | 3.73 | | 18 | |
| 12 | no market | 3.73 | | 18.00 |
| 13 | 3.73 | | 18 | |
| 14 | 3.73 | | 18 | |
| 15 | Sunday | | | |
| 16 | 3.73 | | 18 | |
| 17 | 3.73 | | 18 | |
| 18 | 3.73 | | 18 | |
| 19 | 3.73 | 3.73 | 18 | 18.00 |
| 20 | 3.73 | | 18 | |
| 21 | 3.73 | | 18 | |
| 22 | Sunday | | | |
| 23 | no market | | | |
| 24 | 3.73 | | 18 | |
| 25 | 3.73 | | 18 | |
| 26 | 3.73 | 3.73 | 18 | 18.00 |
| 27 | 3.73 | | 18 | |
| 28 | 3.73 | | 18 | |
| Mch. 1 | Sunday | | | |
| 2 | 3.73 | | 18 | |
| 3 | 3.73 | | 18 | |
| 4 | 3.73 | | 18 | |
| 5 | 3.73 | 3.73 | 18 | 18.00 |
| 6 | 3.73 | | 18 | |
| 7 | 3.73 | | 18 | |
| 8 | Sunday | | | |
| 9 | 3.73 | | 17½ | |
| 10 | 3.73 | | 17½ | |
| 11 | 3.73 | | 17½ | |
| 12 | 3.73 | 3.73 | 17½ | 17.67 |
| 13 | 3.73 | | 17½ | |
| 14 | 3.73 | | 17½ | |
| 15 | Sunday | | | |
| 16 | 3.73 | | 17½ | |
| 17 | 3.73 | | 17½ | |
| 18 | 3.73 | 3.73 | 17½ | 17.50 |
| 19 | 3.73 | | 17½ | |
| 20 | 3.73 | | 17½ | |
| 21 | 3.73 | | 17½ | |
| 22 | Sunday | | | |
| 23 | 3.73 | | 17½ | |
| 24 | 3.73 | | 17½ | |
| 25 | 3.73 | | 17½ | |
| 26 | 3.73 | 3.73 | 17½ | 17.50 |
| 27 | 3.73 | | 17½ | |
| 28 | 3.73 | | 17½ | |
| 29 | Sunday | | | |
| 30 | 3.73 | | 17½ | |
| 31 | 3.73 | | 17½ | |
| April 1 | 3.73 | | 17½ | |
| 2 | 3.73 | 3.73 | 17½ | 17.50 |

**AVERAGE PRICES FOR SEASON, OCTOBER 17, 1941-APRIL 2, 1942 INCLUSIVE:**

Simple average of 24 weekly quotations on SUGAR, Raws, 96 test, 3.61208.

Simple average of 24 weekly quotations on BLACKSTRAP MOLASSES, in bulk f.o.b. plantation, 16.18625.

Simple average of daily quotations on Sugar, October 17, 1941-April 2, 1942 inclusive, 3.61503.

Simple average of daily quotations on Blackstrap Molasses, October 17, 1941-April 2 inclusive, 16.21897.

NEW YORK RAW SUGAR QUOTATIONS were 3.50 on all days that Louisiana raws are quoted at 3.48, and 3.74 on all days that Louisiana raws are quoted at 3.73.

# Determination of Farming Practices War Production Board

## to be Carried out in Connection with the production of the 1942 Crop of Sugarcane in the Mainland Cane Sugar Area, Pursuant to Section 301(e) of the Sugar Act of 1937, as Amended.

Pursuant to the provisions of Section 310(e) of the Sugar Act of 1937, as amended, the following determination is hereby issued:

Section 802.23d *Farming practices in connection with the production of the 1942 crop of sugarcane in the mainland cane sugar area.* (a) *Soil-building requirement.* The conditions prescribed in subsection (e) of Section 301 of the Sugar Act of 1937, as amended, shall be deemed to have been fulfilled with respect to the production of the 1942 crop of sugarcane for sugar on any farm in the mainland cane sugar area if there is carried out in 1942, on land on the farm which is adapted to the production of sugarcane for sugar, an acreage of soil-building practices equal to not less than 15 per centum of the acreage of sugarcane for sugar growing on the farm for harvest in 1942.

(b) *Approved practices.* (1) Each acre of the following shall be counted as one acre of soil-building practices:

(i) Seeding winter legumes.

(ii) Plowing or disking under a good stand and good growth of a green manure crop, or cover crop excluding lespedeza, peanuts hogged off, and non-leguminous cover crops).

(iii) Turning under a good stand and good growth of summer legumes (excluding peanuts, lespedeza, and summer legumes used as truck crops) NOT interplanted or grown in combination with row crops such as corn.

(2) Each two acres of the following shall be counted as one acre of soil-building practices:

(i) Turning under a good stand and good growth of summer legumes (excluding peanuts, lespedeza, and summer legumes used as truck crops) interplanted or grown in combination with row crops, such as corn, provided the summer legume occupies at least one-third of the land.

(3) Each of the following practices in the amounts specified shall be counted as one acre of soil-building practices if applied to a full seeding of winter legumes:

(i) Application of 300 pounds of 16-percent superphosphate (or its equivalent) to, or in connection with the seeding of, winter legumes.

(ii) Applications of 500 pounds of basic slag or rock phosphate (including Colloidal Phosphate) to, or in connection with the seeding of, winter legumes.

(4) Each one and one-half acres of land the top soil of which is combustible (determined as such by the State Agricultural Conservation Committee) on which there are carried out the practices specified in paragraphs B, C, D and E of Amendment 3 to Southern Region Bulletin 101, issued June 11, 1937, for protecting the soil against fire, assuring adequate drainage, and preventing soil oxidation and subsidence, shall be counted as one acre of soil-building practices: *Provided, however,* That there shall be carried out on such land on the farm such other practices as are recommended for the farm by the County Agricultural Conservation Committee, and approved by the State Agricultural Conservation Committee, for protecting the soil against fire, assuring adequate drainage, preventing soil oxidation and subsidence, and otherwise preserving and improving the fertility of the soil and preventing soil erosion, such practices to be consistent with reasonable standards of the farming community in which the land is located.

(c) *Standards of performance.* The soil conserving practices shall be carried out on the farm in accordance with farming methods commonly used in the community in which the farm is located and in accordance with specifications approved by the Director of the Southern Division of the Agricultural Adjustment Agency. (Sec. 301, 50 Stat. 910, 7 U.S.C., 1131).

Done at Washington, D. C. this 1st day of April, 1942. Witness my hand and the seal of the Department of Agriculture.
(Sg) Grover B. Hill

Assistant Secretary

# Transmission of Chlorotic Streak of Sugar Cane by the Leaf Hopper Draeculacephala Portola

*(Reprinted from Phytopathology, January, 1942, Vol. XXXII, No. 1, pp. 99-100.)*

The cause and the means of natural transmission of chlorotic streak of sugar cane have remained unknown since the disease was first differentiated by Wilbrink in Java in 1928. Most workers who have studied the disease have noted that the nature of spread in the field indicated possible transmission by an insect vector, although proof has been lacking.

Experiments on insect transmission of the disease were conducted in Louisiana by the writers during 1941 in an insect-proof greenhouse. Cages 3 ft. long, 3.5 ft. tall, and 2 ft. wide, with tight wooden bottoms, and covered with 40-mesh copper-wire cloth and very finely woven cotton cloth, were used on ant-proof benches. Into each cage were placed from 10 to 15 insect-free chlorotic-streak-diseased plants of the variety C.P. 29/320 growing in sterilized 4-in. clay pots in soil that had been subjected to flowing steam for 3 to 4 hours, and an equal number of insect-free healthy plants growing in steamed soil from cuttings treated with hot water at 52° C. for 20 minutes, which treatment eliminates the disease. In this note, the term "healthy" is used to refer to plants grown from cuttings so treated.

An average of 5 *Draeculacephala portola* per healthy plant was introduced into each cage and allowed to feed for from 7 to 14 days. The healthy plants were then removed from the cages in a closed room separated from the greenhouse and placed in other cages, where they were fumigated twice at intervals of 7 to 10 days before being returned to the greenhouse. In some instances the diseased plants were removed prior to introducing the healthy ones into cages with leaf hoppers that had been feeding for 2 to 4 weeks on diseased plants. The entire

greenhouse was fumigated at intervals of 7 to 10 days.

A total of 490 healthy plants was exposed to the leaf hoppers in this manner, beginning in March, 1941, and continuing to late May. By September 1, 25 of these had developed typical leaf symptoms of chlorotic streak. Twenty of these were from cages containing both diseased and healthy plants, and 5 were from those in which the healthy plants had been exposed to the leaf hoppers following removal of the diseased plants.

As controls, 60 healthy plants were caged with diseased plants, but without leaf hoppers, for the same period of time as those with the insects; between 300 and 400 healthy plants were grown in a bench adjacent to diseased ones in the greenhouse in which the transmission experiments were conducted; and 20 healthy plants were grown for 9 months in a bench of soil in the greenhouse, set alternately at 8-inch intervals with diseased ones, where their roots and leaves were in intimate contact. None of these has shown symptoms of chlorotic streak. In addition, 20 healthy plants have been grown in an insect-proof greenhouse for 2 years in contact with chlorotic-streak-diseased plants and have remained apparently healthy.

While these experiments are of a preliminary nature, they offer proof of transmission of this disease by *Draeculacephala portola*. This leaf hopper is usually more abundant in Louisiana than the total of all other sucking insects found on sugar cane, excluding mealybugs. The question of whether this leaf hopper or close relatives coexist with the disease is of interest. The genus *Draeculacephala* has been reported in Hawaii, Puerto Rico, Colombia, and Louisiana, where chlorotic streak apparently spreads under natural conditions, but not in Java, where the disease was first described. Further experiments with this and other sugar-cane insects are in progress.—E. V. Abbott, Bureau of Plant Industry, and J. W. Ingram, Bureau of Entomology and Plant Quarantine, U. S. Department of Agriculture, Houma, Louisiana.

[1]Although *Draeculacephala portola* Ball has previously been misidentified as *D. mollipes* (Say) feeding on sugar cane in the Gulf States, true *mollipes* appears to occur primarily in the northeastern United States and is not known as a pest of sugar cane in Florida or Louisiana.

# Increase Sugar Production by Roguing Mosaic In Seed Plots

*(I. L. Forbes, Department of Plant Pathology, Louisiana Agricultural Experiment Station)*

The control of sugarcane mosaic by roguing diseased stools in seed plots is no longer in experimental stages but is a fact that has been demonstrated in a number of different areas in the Sugar Belt. In 1938 M. L. Shaffer of the Louisiana Agricultural Experiment Station published results of successful control of mosaic in Co. 290 and Co. 281 under plantation conditions. It was suggested at that time that a combination of seed selection and roguing would seem to be a practical measure for mosaic control. It was also pointed out that it is very important when establishing a seed plot to have planting material as nearly as possible free of mosaic. The establishment of such a seed plot can only be accomplished by a systematic program of seed selection, cane isolation, and roguing supervised by someone familiar with mosaic. It is necessary to begin roguing as early as possible in the spring and to continue until late in the fall. The two varieties being grown in the State at the present time which suffer most from mosaic are Co. 290 and Co. 281. Co. 281 is the most susceptible, the mosaic spreading more rapidly in this variety than in Co. 290. Therefore, the disease is more difficult to control in Co. 281 but it can be done and on a commercial scale.

In St. Mary Parish where Co. 290 is the principal variety grown, farmers have been roguing for a number of years under the direction and supervision of the county agent. As a result the disease has been cleaned up in large areas. To cite one specific example, for the 1938 crop one planter in St. Mary Parish had 3,193 acres of Co. 290. By the use of rogued seed, mosaic was controlled in this crop resulting in an estimated increase of five tons of cane to the acre, or a total increased return of $70,000 to this grower. In Iberia Parish, also, quite a bit of roguing work has been done with Co. 290. In some of the other areas mosaic-free seed of Co. 290 has been used to a lesser extent. Commercial control of mosaic in Co. 281 has been practiced to a lesser extent. However, very favorable results have been obtained in some areas, especially on certain of the South Coast Properties at Montegut, and on privately-owned plantations at Napoleonville and elsewhere. Many growers are already sold on the idea of using mosaic-free seed cane. The practice should be general throughout the Belt.

Now is the time to make plans for having an available supply of practically mosaic-free Co. 290 and Co. 281 seed cane for planting this coming fall. Two possibilities are suggested. First, establish your own seed plots and rogue (dig) out every mosaic plant that appears during the spring and summer months. This will insure a healthy seed supply for fall planting. Second, in the event you do not have Co. 281 or Co. 290 cane in which the prevalence of mosaic is below 15 per cent, and therefore could not practically free such cane by roguing, then we suggest that you arrange with growers or county agents in areas where the mosaic has been brought under control to supply you with healthy seed this fall. At least try and get enough healthy seed to establish your own seed plot. Your county agent can assist and advise you in this matter.

Some growers have the idea that Co. 290 is deteriorating and should be abandoned. We are convinced that this apparent deterioration is due to disease,—mosaic and red rot principally. The mosaic can be controlled by the methods discussed above, and plantation results have shown the control of mosaic in Co. 290 to be highly practical. Red rot is not as easy to control, but by using good seed and planting in well prepared soil having a proper moisture content, satisfactory stands can be expeeted.

The practical control of mosaic in Co. 290 alone in the State should increase the annual production by at least 15 per cent, or over 100,000 tons of cane. Isn't this worth considering at the present time?

# USDA Launches Nationwide Program To Conserve Bagging for Agriculture

A nationwide program for the conservation of cotton and burlap bags for packaging agricultural commodities was announced recently by the Department of Agriculture. Designed to offset a serious shortage of bags and bagging material, the program will be conducted by USDA State and County War Boards with the cooperation of farm organizations, State agricultural commissions, grain, seed, feed, and bag dealers.

Major objectives of the program are: (1) to urge farmers to handle bags carefully so they can be used repeatedly and (2) to promote the quicker return of usable bags into trade channels.

Department of Agriculture officials believe the program should serve to reduce new bag requirements, relieve local shortages and help to promote a greater, steadier flow of usable second-hand bags into trade channels for distribution as they are needed in various harvest areas.

War has already greatly reduced imports of burlap and stocks now on hand must be shared with our military forces as well as with the increased requirements of agriculture under the program for expanded production. Consequently, Department officials point out it is necessary to make every bag do more than double duty, and, where possible, to substitute bags made of other materials for new burlap bags.

Normally about 60 percent of all textile bags manufactured in the United States are used for agricultural purposes and approximately half of those used by agriculture are made of burlap imported chiefly from India. Burlap imports, due to war, are now negligible. Raw cotton stocks are ample, but at best only slightly above normal supplies of cotton bags will be available for use during the first half of 1942 since the mills which manufacture heavy cotton bagging material are at present working to capacity to fill war orders.

Under the bag conservation program, methods of handling, cleaning, and storing bags for future use will be suggested to farmers in every section of the country. Wherever it is feasible, the major problem of keeping bags in circulation may be met by the operation of bag exchanges. The exchanges would serve to prevent accumulations that frequently keep large supplies out of normal trade channels.

# Changes In Order No. M-54

Division of Industry Operations

Operational changes in the molasses Order, M-54, were made in an amended version of the Order issued recently by J. S. Knowlson, Director of Industry Operations. The full amendment was printed in the April 15th issue of the *Sugar Bulletin*.

The amendments to the Order cover these points:

1. Hydrol, corn sugar molasses, is included in the definition of molasses and is subject to all terms of the Order.
2. Distributors are divided into two classes, primary and secondary. Deliveries of molasses may not be made by a primary distributor without specific authorization. Secondary distributors are not thus restricted.
3. Definitions of various classes of purchasers have been rewritten to include all users of molasses.
4. Manufacturers of yeast, citric acid and vinegar and users of molasses for foundry purposes are granted a quota of 110 per cent of their consumption for the year ending June 30, 1941.
5. Manufacturers of yeast, citric acid, edible molasses and edible sirup may purchase molasses on a yearly rather than a quarterly basis.
6. Deliveries of edible molasses and edible sirup may be made without reference to the terms of the Order.
7. Molasses may not be exported without express permission of the Director of Industry Operations.

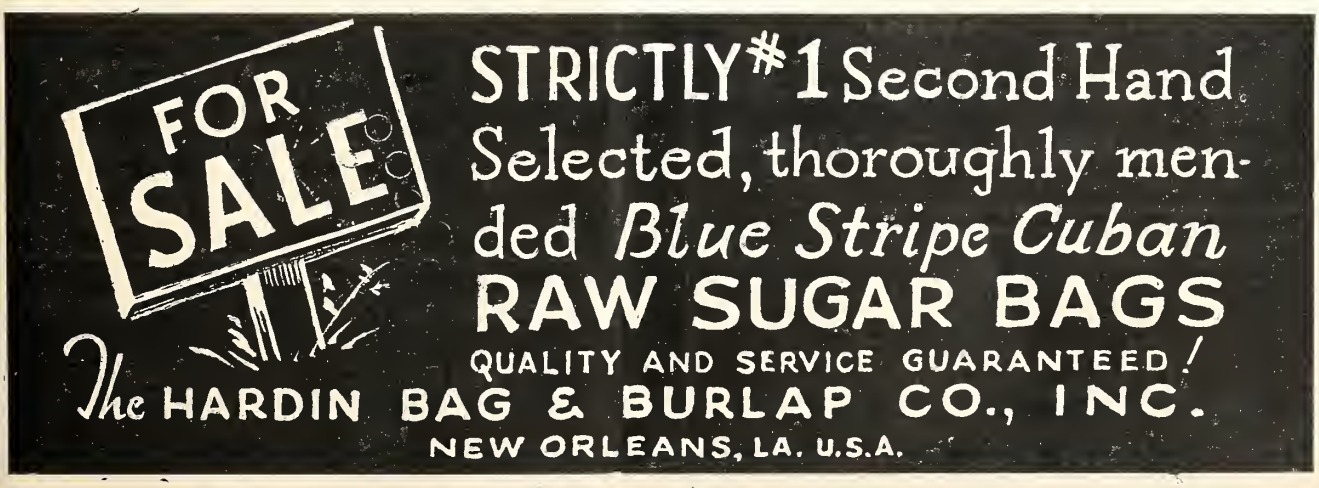
## *Little Pickups*

*Burlap and cotton bags* should be carefully opened and saved either for sale as second-hand bags or for use on the farm.

Fred S. Wallace, farmer, Gibbon, Neb., has been appointed *administrator, Agricultural Adjustment Administration*. He succeeds R. M. Evans, who has been made agricultural adjustment and conservation administrator for the Department.

Because of scarcity of burlap and cotton bags which are being allocated to war uses, most fertilizers shipped this spring must be in *paper bags*.

Our Government needs *scrap metal*. Farmers are urged to collect and dispose of such materials promptly to the nearest scrap dealer.


FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

LAMBORN & COMPANY, INC.
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

LE BOURGEOIS BROKERAGE CO.
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
HARRY L. LAWS & CO., INC.
Brokers and Distributors
SUGAR and MOLASSES
SUGAR FUTURES
American Bank Building New Orleans, La.

GAY, SULLIVAN & CO., INC.
SUGAR
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

STAUFFER, ESHLEMAN & CO., LTD.
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline
Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
CYANAMID
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

INDUSTRIAL LUBRICANTS

BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
STANDARD OIL CO. OF LA.

FOR SUGAR CANE FINANCING
STATE AGRICULTURAL CREDIT CORPORATION, INC.
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

AMERICAN MOLASSES CO.
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LEGardeur Frank Youngman
R. J. LEGARDEUR & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

PENICK & FORD, LTD., INCORPORATED
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

STANDARD SUPPLY AND
HARDWARE CO., INC.
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

E. A. RAINOLD, INC.
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

La. State University.

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 20 NEW ORLEANS, LA., MAY 15, 1942 No. 16

# Sugar and War Consciousness

*(By C. J. Bourg)*

The registration carried on at the beginning of this month throughout the United States, whereby each individual and family of the entire population have become eligible for sugar rationing cards, has made the American people more than ever conscious of the importance of sugar.

It is significant that sugar has been the first subject of national rationing. As one of the purposes of rationing is to bring the Nation to a complete consciousness of total war, this recognition of sugar as a means of reaching the national consciousness signifies that, in addition to being an essential energy food, sugar is a psychological medium. Fundamentally, the rationing of sugar is charitable in its purpose, because it means that every individual in the country will get his or her proportionate share of the available supplies. The fixing of a ceiling on the retail price of sugar, based upon the prices charged in March 1942 by retailers, has likewise eliminated the ability of the more fortunate to "buy" more than their share. Therefore the rationing of sugar is bound to bring home to all of us that we are applying a democratic process and procedure.

### "Let's Tell The Story"

It seemed to us most appropriate when we read in the official magazine of the National Beet Growers Association the following editorial:

"Sugar is front page news these days—not only here in the West where beet sugar is grown—but all over the United States. The daily press is talking about sugar. Editorials are being written about it. Magazine writers are writing stories about it, and radio commentators are talking about it.

"Not all of these news articles, magazine stories and radio comments are friendly to our own beet sugar industry. In fact some of them are anything but friendly, but an analysis of the unfriendly comments generally develops a lack of knowledge, on the part of their authors, of the real facts about our industry.

"Here, then, is a golden opportunity for our industry—growers and processors together—to place the real facts before the public. We are glad to see that something along this line is now being done, but more should be done and done quickly, because while sugar is front page news today, it may be back page news tomorrow, and if we are to get the best value from such information as we can and should put out to the public, we should be doing this now.

"Every one of our local associations can help in this effort by contacting the papers in their area and giving them the real facts about our industry. Every grower, too, can help by spreading the word in his own community.

"Let's all get together and tell the whole nation about the great economic value of our industry that makes beet sugar, which is just as fine and pure and sweet as any other sugar, and which doesn't need a ship to get it to our markets."

### Transportation Problems

The shortages in sugar, whatever and wherever they may be, have been brought about primarily by the shortage of ships, rather than the shortage of sucrose. There is plenty of sugar in the world, but the supplies are not in the right places from the standpoint of the American consumers. The difficulty of chartering ships to bring sugar into United States ports from offshore islands has brought about additional problems of distribution. Raw sugars from Cuba and Puerto Rico can be brought into Gulf ports much more readily and safely than into ports of the northeastern seaboard of the United States. One of the nice questions of Government policy is whether the refineries of Louisiana and Texas should not be operated at full capacity to conserve transportation facilities. True it is that the refineries of the eastern seaboard are operating at considerably less than capacity and below normal. There are considerations of employment in these plants and affiliated distribu-

THE SUGAR BULLETIN

414 Whitney Bldg., New Orleans

Marcel J. Voorhies, Editor

Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
Subscription Price, 50 Cents per Year.

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE

President, W. C. Kemper, Franklin, La.

1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

EXECUTIVE COMMITTEE

W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Çinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

tion or transportation systems. Nevertheless, all matters are pretty much being considered on a national scale during these war-times, and there is the proposition as to whether it is more efficient and economical in a national sense to transport raw sugar from ports on the Gulf of Mexico to eastern seaboard refiners or to have that raw sugar refined in the South and transported to points of consumption as standard granulated sugar. Obviously, if raw sugar goes from New Orleans to New York by rail, then the refined sugar is distributed locally in the States of New York, Pennsylvania, Maryland, Virginia and West Virginia; on the other hand, if the raw sugar is refined in Louisiana, it can be shipped as refined sugar direct into West Virginia, Virginia, and the western parts of Maryland, Pennsylvania and New York. This procedure would eliminate the double-haul, and conserve transportation facilities. We state these problems as examples of the difficulties of distribution, with the sincere intention of bringing to the minds of our readers the vast complications of the sugar problem. We are mindful that any consideration of these difficulties will necessarily lead the thinking of an open-minded person to give the proper evaluation to the continental production of sugar as a constructive element in the economic sufficiency of our country in times of peace, which have proved to be, for all practical purposes, a prelude to war-times.

### Trucks and Tank-Cars

The Office of Defense Transportation issued orders which will have far-reaching effect in connection with trucks, whether privately-owned or common carriers, and in the use of tank-cars. One item which may affect the distribution of sugar quite seriously is that a truck operating in interstate commerce must carry a 75% load on the return trip. Another example is that a tank-car is not to be used except for transporting liquids over 100 miles, unless a special permit is secured from the Director of Defense Transportation. To whatever extent sugar is delivered by truck, or molasses and syrup are delivered by tank-car, these orders will affect the distribution of the products of the 1942 sugarcane crop.

### Priorities

The domestic sugar industry has for months sought to secure an industry rating, based upon the fact that sugar is essential in the war effort and the production of greater quantities of sugar in the United States is desired by our Government. The chief difficulty has been that the general procedures worked out by WPB in connection with priorities and preference ratings have to do with industries which operate twelve months in the year. There are comparatively few seasonal industries. As a result the domestic sugar industry has been pretty well operating on the basis of exceptions to the general rules. Several bottlenecks have been worked out and eliminated—the outstanding case being that of filter cloth; but the industry now looks with concern to the approaching harvest. Several procedures have been considered by WPB, but so far none has been adopted. By the practical force of these trial-considerations, it is now probable that a workable procedure is in the making; at least, we know definitely that some of the procedures cannot be applied. Accordingly, consideration is now restricted to an adjustment of the special problems of the domestic sugar industry to a procedure whereby priorities may be obtained under the Production Requirements Plan of WPB. The officials of WPB are conscious of the necessity for a decision well in advance of the operating season; and assurances have been given that a plan will be adopted in advance of the harvest or grinding season to take care of the industry on repairs, maintenance, and operating supplies.

## Report of Special League Committee Relative to Selective Service Procedure in Regard to Occupational Classifications

May 11, 1942.

In the February 15, 1942 issue of *The Sugar Bulletin*, we published certain information relative to the application of the Selective Service Act to employers and employees in the Louisiana sugar industry.

On April 29, 1942, a further conference was held between Brigadier General Raymond H. Fleming, Director of Selective Service, Major J. Lester White, Chief, Occupational Classifications Division, and certain members of the League's Executive Committee. As a result of this conference, we wish to submit to our members the following information:

The Regulations provide that in Class II-A shall be placed any registrant who is found to be a "necessary man" in industry, business, employment, agricultural pursuit, governmental services or any other service or endeavor, the maintenance of which is essential to the national health, safety or interest.

Now that we are at war, the phrase "National health, safety or interest" no longer includes mere convenience or comfort. Activities essential to the national health, safety or interest are now limited to those activities, other than war production which *support the war effort.* Activities supporting the war effort include those activities which provide food, clothing, shelter, health safety and other requisites of our daily life.

In order that an activity may be considered essential to the support of the war effort, its facilities must be predominantly devoted to that purpose.

Selective Service Regulations provide that in Class II-B shall be placed any registrant found to be a "necessary man" in any industry, business, employment, agricultural pursuit, governmental service or other service or endeavor the maintenance of which is necessary to the *war production program.*

With reference to such civilian activities, the phrase "Necessary to the war production program" now means the work of processing or producing ships, planes, tanks, guns and other machines, instruments, articles and materials directly used in the prosecution of the war.

In order that an activity may be considered as necessary to war production, its facilities must be predominantly devoted to that purpose.

In order that a registrant may be considered as a "necessary man" in an activity necessary to war production, or in any other activity essential to the support of the war effort, such registrant must be engaged in a "critical occupation".

A "critical occupation" in any such activity is one which must be filled by a man with the required degree of training, qualification, or skill, for the proper performance of the duties involved. Occupations in order to be considered "critical occupations" must be such that, unless they are filled by men with the required degree of training, qualifications, or skill, there will be a serious loss in the effectiveness of the activity. "Critical occupations" exist only in activities which are necessary to war production or are essential to the support of the war effort.

Selective Service Regulations provide that a registrant shall be considered as a "necessary man" in an activity necessary to war production or an activity essential to the support of the war effort, only when all of the following conditions exist:

(a) He is, or but for a seasonal or temporary interruption should be, engaged in such activity;

(b) He cannot be replaced because of a shortage of persons with his qualifications or skill in such activity; and,

(c) His removal would cause a serious loss of effectiveness in such activity.

Those who registered on October 16, 1940 (ages 21 to 36) are referred to as Group One. Group Two includes those who registered on July 1, 1941 (those who became 21 years of age between October 16, 1940 and July 1, 1941). Those who registered on February 16, 1942 (20 year olds and ages 36 to 45) are in Group Three. In Group Four are those who registered on April 27, 1942 (ages 45 to 65).

The registrants in Groups One, Two and Three are subject to military service. Those in Group Four are not. With few exceptions, all in Groups One and Two have now been classified but, because of changing Regulations and Policies, may be subject to reclassification at any time. Those in Group Three are now receiving Selective Service Questionnaire (D.S.S. Form 40) as well as the Occupational Questionnaires (D.S.S. Form 311). The Occupational Questionnaire has nothing to do with the registrant's classification but is merely the instrument by which an inventory of the industrial manpower of the nation is being accomplished.

When registrants in Groups One and Two are being considered for reclassification, a registrant will receive a notice to appear before the board or a notice to report for a physical examinataion, and if in Class IV-F or Class I-B, maybe receive a card notice informing him that he has been reclassified to Class I-A. When any such notice is received, it is then that the employer should submit D.S.S. Form 42-A (obtainable at any local board office), requesting a deferment if the registrant is in a critical occupation and a qualified replacement is not available.

Those registrants in Group Three are now receiving the Selective Service Questionnaires according to their order numbers. Each registrant has ten days from the date of mailing in which to complete and return the Questionnaire to his local board. His employer has the same ten day period in which to complete D.S.S. Form 42-A and mail to the registrant's local board if he desires to request an occupational deferment.

When an employer asks for a registrant's deferment and that request is denied, the employer will receive D.S.S. Form 59 notifying him that his request has not been granted but calling his attention to his right of appeal. If the employer wishes to appeal the classification he does so by signing at the bottom of D.S.S. Form 59 and returning the letter to the local board within ten days of the date of mailing.

Class II-A and Class II-B deferments are granted for a maximum period of six months or less, and are provided in order that the employer may have time to train or otherwise secure a replacement. If at the expiration of a Class II-A deferment, the employer shows that he has made a reasonable but unsuccessful effort to replace the registrant, and if such classification is warranted, the registrant may be again classified in Class II-A for a period of six months or less.

At the expiration of the registrant's deferment in Class II-B, the classification is reopened and he is classified anew. The registrant may be again classified in Class II-B for a period of six months or less if such classification is warranted and if the registrant's employer has made a reasonable but unsuccessful effort to secure or train a replacement for the registrant during the deferment period.

Registrants, who are granted occupational classifications because of the fact that they are engaged in critical occupations in essential industries should remain in industry until replacements become available. Those who are technically qualified for commissions in the Army or Navy will, in all probability, be given an opportunity to make applications for such commissions.

Employers should make a check of their personnel now to determine those who are registrants and then notify the key men to keep the employer informed when notifications are received from the registrant's local board or, in the case of Group Three registrants, the Questionnaire is received by the registrant in order that request for occupational classifications may be submitted by the employer.

# The Problem of Weed Control on Louisiana Sugar Farms

(*by Eaton M. Summers, John C. Burden, and F. A. Graugnard, Jr.*)

The control of weeds in Louisiana sugarcane fields, like many other practices in sugarcane agriculture, presents many problems peculiar to this industry. The problems encountered, therefore, require special treatment and investigation. It is fortunate indeed that, in the lore of sugarcane culture accumulated during the past century, practices have evolved that are largely adequate for weed control under normal conditions. There have arisen, however, a number of problems that demand special attention. Notable progress has been made toward solving some of them but much remains to be done before satisfactory weed control practices for all conditions will be evolved. It is the purpose of this committee to assemble available information and to encourage experimentation in the hopes of making some progress toward a more adequate weed control program.

A questionnaire was sent to each member of this society as well as to a number of other planters, county agents, etc., asking them to state (1) Their weed control problems, (2) Successful methods of control developed or practiced by them, and (3) Any suggestions to guide this committee in their work. A gratifying response was obtained and the answers served to crystallize the situation into a few definite trends.

The following facts stand out quite clearly:

1. Alligator weed (*Alternanthera philoxeroides*) is the most feared and most baffling weed in Louisiana fields wherever it occurs. It is spreading rapidly and, to date, there has been discovered no adequate control. It is a serious threat to rice and other crops as well as sugarcane. It is, however, apparently susceptible to dense shading.

2. Johnson grass (*Sorghum halepense*) is a serious threat but can be controlled in the opinion of most farmers by the "Burden system", consisting of a combination of fallow plowing and smother crops, or some modification thereof. Continuous pasturing for 2 or 3 years will also eradicate it.

3. Ditch banks are the worst threat to control of noxious perennial weeds by cultural practices because they are a constant source of reinfestation.

4. The increasing labor shortage makes more urgent the development of mechanical or chemical means of replacing much of the labor currently used in weeding (i.e. hoeing) in ordinary field practice.

A number of other observations and suggestions were included in the answers to the questionnaires. All were pertinent to the problem of weed control and are being considered by the committee.

Control of weeds by chemicals has been tried under practically all conditions and on every imaginable type of weed. The results have varied from complete control to none at all. Tender, broad-leaved, annual weeds frequently can be easily controlled by spraying with chemicals. An outstanding example of this is the control of wild mustard in small grain fields in the States on the Pacific Coast by differential sprays. They give over 90 percent control of the weeds while increasing grain yields to more than double that of unsprayed plots in many instances. On the other hand, many deep-rooted perennials, such as wild Morning Glory and Quack Grass in the Mid-west and Johnson Grass and Alligator Weed in the South, have proven to be very hard to control. Between these extremes there have been many instances of satisfactory practical control, others of partial or indifferent control, and many of complete failure.

A list of chemicals used for weed control would be very long. The methods of application would likewise compromise a wide variety. Time and rate of application are factors that have to be dealt with individually. Cost of chemicals and equipment for use in applying them are widely variable. The expense per unit of area is naturally less of a factor where only a small area is involved. It might be practical to spend a relatively large amount on a small area if eradication of weeds in that area would remove the threat of spread to a large area. The same price per unit area would be prohibitive on a field scale.

While there have been many efforts to control Johnson Grass and Alligator Weed with chemicals in and around Louisiana cane fields the results to date have not been very promising. These efforts are being continued, however, and if anything promising is found it will be brought to the attention of the industry.

It is desirable, of course, to control noxious weeds without taking the land out of production and with a minimum expenditure. If regular cropping must be dispensed with the program should, if possible, include soil-improvement practices such as planting to legumes.

Cultural control of Johnson grass has been quite successful where a combination of fallowing and planting to smother crops is used. The system described by John C. Burden and used by many others consists of fallowing during the first summer, after either plowed-out stubbles or soybeans, and planting *Melilotus indica* in September. This forms an adequate "smother crop" until the following May when it is plowed under. Fallowing, as necessary, is practiced during the summer and cane is planted in the fall. It is essential that the Johnson grass be not permitted to make any appreciable growth at any time in order to starve out the roots.

In one variation of this system the plowing is done toward the center of each cut resulting eventually in a rounded contour instead of the depression common to most fields. This is highly desirable from the standpoint of drainage and tends to flatten down the edges of the ditches thus making them easier to care for.

Pasturing for 2 or 3 years has proven to be a satisfactory method of controlling Johnson grass. This should take care of the ditch bank problem where it can be worked into the farm program. It would also mean that the land would not have to be taken out of production for any appreciable period as where fallowing is practiced.

The fact that alligator weed is susceptible to intense shade lends some hope to smothering it out by cropping but apparently the treatment will have to be more severe than is required for controlling Johnson grass. The fleshy stem and root of alligator weed enable it to withstand extensive exposure and drying. It is, consequently, able to survive long periods of either fallow or smothering. It is possible that further

trials with densely growing crops such as oats followed by sweet potatoes might smother it out if continued for 2 or 3 years.

The control of annual weeds in the growing crop frequently becomes a serious problem in seasons of prolonged wet weather such as occurred rather generally during 1940 and 1941. It was impossible to "lay by" the sugarcane crop in many sections either of these years. As a result the fields were overrun with weeds that would ordinarily have been killed by cultivation.

Another serious factor in producing the cane crop is the present labor shortage which makes the customary hoe work both uncertain and expensive. Mechanical hoes have been tried with varying success but have not been generally adopted.

It is here that the new "flame cultivator" fits in. It has been used successfully on both corn and cotton where it has controlled weeds without injury to either crop. It operates on the theory that thin, tender weeds are destroyed by flames that do not affect the sturdy cane shoots during the very short time of exposure. This implement could replace much of the hoeing in cane and could be used to control weeds even when the fields were much too wet to cultivate.

The flame cultivator is mounted on a tractor which travels at approximately 5 miles per hour. It has 4 nozzles, 2 of which are directed at each side of one row and one at each adjacent row. Kerosene or a similar cheap oil is used for fuel and is supplied to the nozzle by a compressor. The estimated cost is much below that of hoeing.

This machine was developed in Alabama by Captain Price McLemore. A model, adaptable to sugarcane fields, has been built by Professor H. T. Barr of the Louisiana State Experiment Station. It will be in operation on Glenwood Plantation at Napoleonville this season. It is likely that more of these flame cultivators will be built and put into operation by other planters. The results of this innovation in weed control will be watched with much interest.

Something should be said about the danger of importing new weeds. Like most serious diseases and insects noxious weeds have usually been introduced through carelessness or ignorance on the part of someone. It is the duty of every sugar planter to keep this in mind not only in bringing in seed cane from other sections but also in buying seeds such as Melilotus, Soybeans, and alfalfa. Demand the best certified seed and be always on the lookout for new or unknown weeds. Even the introduction of new crops is dangerous unless a quarantine period has been observed before they are released. The new crop may become a weed. Johnson grass for instance, is a cultivated crop in some areas and I have seen "cypress vine" advertised for sale as an ornamental. Concerted action on the part of a group such as this might at least stop the commercial dissemination of weeds:

The committee wishes to thank all those who responded to our questionnaire. Their answers and suggestions have been very helpful. We are especially indebted to Professor Harold T. Barr for his counsel and assistance in connection with the new "flame cultivator".

*Presented at meeting of Agricultural Section of Louisiana Sugarcane Technologist Association at Houma, La., April 28, 1942.*

# Drainage Program in the Sugar Belt

Drainage in the State of Louisiana has received considerable attention by various agencies during the past year. The Farm Credit Administration, Soil Conservation Service, Bureau of Agricultural Economics, Louisiana State University, Louisiana State Department of Public Works, and Army engineers are separately and collectively gathering data on the present drainage situation, drainage districts, drainage laws, maintenance and most urgently needed work.

As of March, 1941, there was a total of 688 drainage districts organized in the State. Of this number, 397 were organized but subsequently dissolved; 79 are inactive, 8 have been abandoned, and 204 are now active. The 79 inactive districts, each create an uneconomical situation. A loan agency, in arriving at an evaluation of farm land within an inactive district will either refuse to loan or make a low loan in order to protect themselves, should the district be revived and a heavy drainage tax levied.

The local Land-use Planning Committees and the Soil Conservation Drainage districts have been asked to take over the duties of dissolving the dormant districts or making them to become active. In the past, many districts were formed without adequae engineering supervision; resuling in faulty proportioned lateral and main disposal canals. In some instances, the canals within a district were well proportioned; but no provision had been made for caring for the water after it left the district. In these cases, it has either flooded the area down stream in periods of heavy rain fall, or backed up within the district because of inadequate outlet below, resulting in flooded crops and silt deposits in the newly created canals. The ultimate goal is for a state-wide coordinated drainage system for the State of Louisiana.

Lack of proper maintenance has resulted in the failure of some drainage systems and has reduced the efficiency and effectiveness of others. A few dollars spent wisely, each year on maintenance will keep a drainage system in good condition; however, on the other hand, if a drain is neglected until reconstruction becomes necessary, the reconstruction work often costs 150% to 200% of the original cost of the work, due to the adverse conditions such as trees, embedded logs and debris not found in the original construction.

In establishing the drainage research work on New Hope Plantation this spring, it was decided to investigate the public canal serving this area. In following the canal thru the swamp for some 2¼ miles, it was found in very poor condition. Loggers in attempting to float timber out of the swamp, had left 30 logs partially submerged and no doubt others, totally submerged. A few large trees had fallen in the canal, partially obstructing the flow and catching some debris. Storm damage had caused some of these trees to fall, while others had been cut by loggers and left where they fell. Ten large cypress stumps, which perhaps were there when the canal was constructed, were each catching debris, and in some cases had collected sufficient silt to be called islands by the local people. In another location, negro moss pickers had cut a tree falling it across a main drainage canal and soon almost blocked the drain.

Quite a few letters and personal calls were made by

members of this committee on persons who were working in an effort to improve their drainage systems. Very few answered letters, and others stated they were short of men because of the war, and could not take the time to furnish any figures or put out any extra time on additional work.

Such practices and figures as were obtainable are presented in hope that they may be of some benefit.

In establishing new canals some recent work was contracted in West Baton Rouge Parish at 10.8c per cubic yard, this included leveling of the spoil bank.

Smithfield plantation using a Loraine dragline, with a 1/2 cubic yard bucket, put in a new field ditch with a 2 ft. 6 in. bottom, a 5 ft. 0 in. top and 2 ft. 6 in. depth at a cost of .0534 cents per cubic yard. New ditches on the same plantation by hand labor cost 60 cents per acre foot or .0772 cents per cubic yard. On the same plantation, using the dragline, a canal was cleaned out removing material 2 ft. deep and 4 ft. wide at an average cost of 11 cents per cubic yard or $3.30 per 100 ft. of canal.

The Glenwood Cooperative are using a Castagnos cane loading machine equipped with a home-made bucket for cleaning the main lead ditches and canals, with very good results. In using the machine, dirt is removed from 4 to 8 inches deep, plus all grass, at a cost of 40 cents per acre foot. Similar work by hand labor cost 75 cents per acre foot. The bucket for this machine was made in their own shop by narrowing a cane grab to 18" and covering the insides of the teeth and sides with steel sheets 3/16" or 1/4" thick.

Cleaning or plugging of the field ditches is done almost entirely by hand and often neglected. Cinclare plantation reports their cost of cleaning by hand labor to be 50 cents per acre foot; but if cleaned during the dry season by putting a one mule plow down in the ditch and then throwing out the loose material by hand, that the cost can be cut to approximately 25 cents per acre foot.

At the present time the Agricultural Engineering Department at Louisiana State University have under construction a ditch cleaning machine for field diches, which it is believed will speed up cleaning and lower the cost of such operations.

The Agricultural Engineering Department of Louisiana State University in cooperation with the Drainage Division of the Soil Conservation Service have constructed a light weight mole drain machine. A track laying tractor of suitable size has been shipped to Baton Rouge for operating the mole drain machine, and as soon as a few repairs have been made to the tractor, several test areas are to be mole drained.

Louisiana Sugarcane Technologists Association
Committee on Drainage

Harold T. Barr, Chairman
R. T. Gibbens, Jr.
L. C. Bourgeois, Jr.
Bronier Thibaut

*Presented at meeting of Agricultural Section of Louisiana Sugarcane Technologist Association at Houma, La., April 28, 1942.*

"I use MAGNOLIA PRODUCTS 100% because I know I'm getting my money's worth"* a J. Sherer McALLEN, TEXAS

*Pictures show Mr. Sherer working in his citrus grove neor McAllen, Texas, where he grows oranges, grapefruit, lemons and limes.*

From the citrus groves in the Valley to the wheat fields in the Panhandle every farmer is vitally concerned with the cost of operating power equipment. Of all the costs involved in modern farming, it is the one most easily controlled through proper selection of tractor lubricants and fuel.

It is worth knowing, as Mr. Sherer and thousands of Southwestern farmers know, that you can always be sure of getting your money's worth by purchasing Magnolia Products.

A plus value that contributes to this worth is the helpful service and advice that local Magnolia Agents are qualified to give.

**This is o voluntary statement for which no compensation of ony description wos given to Mr. Sherer.*

MF-102

MAGNOLIA AGENTS

Offer immediate delivery of tractor lubricants and fuels

A SOCONY-VACUUM COMPANY

MAGNOLIA PETROLEUM COMPANY

## Liquid Nitrogen Fertilizer Demonstration

*(Cinclare Central Factory, R. T. Gibbons, Jr.)*

The demonstration was conducted in cooperation with the Barrett Co. and the Louisiana Experiment Station. It consisted of using liquid nitrogen as a source of nitrogen and comparing results with those obtained from cyanamid and no fertilizer treatment.

A uniform field of C.P. 28-19 first year stubble cane on our Additions Plantation was used for the demonstration. The field was divided into three parts of three acres each. Fertilizer was applied on April 10th. All plots were given the same cultivation and harvested on November 4th and 5th. Harvest results were as follows:

| Treatment | Pounds of Nitrogen per A | Tons Per A | Brix | Suc. | Pur. |
|---|---|---|---|---|---|
| Liquid Nitrogen | 36 | 19.53 | 16.99 | 14.01 | 82.46 |
| Cyanamid | 36 | 21.32 | 17.25 | 14.57 | 84.49 |
| No Fertilizer | None | 17.92 | 17.66 | 14.97 | 84.79 |

Since the plots were not replicated the small difference between the liquid nitrogen and the cyanamid cannot be regarded as significant.

*Presented at meeting of Agricultural Section of Louisiana Sugarcane Technologist Association at Houma, La., April 28, 1942.*

## Contact Committee Meeting

A meeting of the Contact Committee of the American Sugar Cane League was held at Baton Rouge, Louisiana on March 11, 1942. Those present were:

Contact Committee: Stephen C. Munson, *Chairman,* Bronier Thibaut, E. A. Maier, F. A. Graugnard, Jr., Horace Nelson, Alfred A. Thibaut, H. K. Bubenzer.

Houma Experiment Station: E. M. Summers, E. K. Bynum, J. W. Ingram, R. L. Holmes, Ralph Mathes, Leo P. Hebert, Lester G. Davidson.

Experiment Station Staff: W. G. Taggart, C. W. Edgerton, C. O. Eddy, S. H. Smith, C. B. Gouaux, E. C. Simon, I. L. Forbes, A. L. Dugas, Harold Hoffsommer, P. J. Mills, W. J. Luke, R. A. Ballinger, P. S. Williamson, H. T. Barr, K. E. Ford.

Extension Division Staff: H. C. Sanders, A. E. Camus, M. Valois, A. B. Curet, Al Moreau.

Visitors: M. J. Voorhies, W. Foley, C. Earnest, R. T. Gibbens, L. C. Bourgeois, J. B. Holley, E. Munson.

Dr. Edgerton and Mr. Luke reported on the work being carried on in chlorotic streak control by hot water treatment. The report also included comments on the favorable effect on germination by the hot water treatment.

Dr. Ballinger reported on the cost studies for both sugar mills and large farms. He also submitted for the consideration of the Committee, "Valuation Procedures for Sugar Mills and Large Farms."

Dr. Dugas reported on Sugarcane Borer Investigations in 1941.

Dr. Hoffsommer presented a paper on, "The Sugarcane Farm." He reviewed the summary statements in the back of Louisiana Bulletin 320 and discussed each briefly.

Dr. Williamson, Exchange Professor in Agricultural Economics taking the place of Dr. Efferson, who is on leave at Cornell for a year, reported on the cost studies of small sugarcane farms.

**PAUL, RICE & LEVY**
INCORPORATED
Wholesale
INDUSTRIAL, MILL & MARINE SUPPLIES
Day, Ra. 6123 Night, Fr. 2019
501-505 Poydras St.
New Orleans, - - La.
O I C VALVES
GUILD & GARRISON PUMPS
INTERNATIONAL INDUSTRIAL PAINTS
CHESTERTON PACKING
K-TING MANILA ROPE
CONSOL OILS
VULCAN SOOT BLOWERS

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

LAMBORN & COMPANY, INC.
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

LE BOURGEOIS BROKERAGE CO.
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
HARRY L. LAWS & CO., INC.
Brokers and Distributors
SUGAR and MOLASSES
SUGAR FUTURES
American Bank Building New Orleans, La.

GAY, SULLIVAN & CO., INC.
SUGAR
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

STAUFFER, ESHLEMAN & CO., LTD.
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
CYANAMID
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

INDUSTRIAL LUBRICANTS

BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
STANDARD OIL CO. OF LA.

FOR SUGAR CANE FINANCING
STATE AGRICULTURAL CREDIT CORPORATION, INC.
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

AMERICAN MOLASSES CO.
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LEGardeur Frank Youngman
R. J. LEGARDEUR & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

PENICK & FORD, LTD., INCORPORATED
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

STANDARD SUPPLY AND HARDWARE CO., INC.
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

E. A. RAINOLD, INC.
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

We stand for the encouragement of Home Industries as against foreign Competition

Vol. 20 NEW ORLEANS, LA., JUNE 1, 1942 No. 17

# Talk On Farm and Home Hour Broadcast

*(By C. J. Bourg)*

The Louisiana sugar industry is one of the very oldest agricultural industries in the United States, having been started in the middle of the 18th Century by some Jesuit priests who brought a few stalks of cane from the West Indies. The granulation of sugar from the sugarcane juice had been accomplished in Louisiana by the time that Louisiana was ceded by France to the United States in 1803. Sugar was being produced commercially in small quantities by 1812 when Louisiana was admitted as a State of the Union. The alluvial soils enrichened with deposits left by the floods of the Mississippi River in the southern part of the State have made the production of sugarcane in Louisiana a potentially profitable enterprise. The semi-tropical climate, undoubtedly aided by the proximity to the Gulf of Mexico, makes the growing of sugarcane an ideal crop, despite the general impression that sugarcane should be only grown in tropical countries.

Farmers of the Middle West know that corn lived as a tropical plant for centuries and only gradually reached its ideal habitat in temperate zones through the selection of seed and the adoption of advanced cultivation methods.

From the purely agricultural standpoint, scientists have recognized sugarcane as very well adapted to the semi-tropical climate of Louisiana, where sugar can be produced from sugarcane as efficiently as in any tropical Island, subject only to the maintenance of the American Standard of living for farmers, and laborers as well. Over 150 years' experience has proved this true!

The development of sugar production in the United States had reached a point at the time of the War between the States where Louisiana was the greatest source of supply for the sugar consumed in the United States. The principle of tariff protection had become the established policy of the United States. The creation of the beet sugar industry, and the adoption of preferential trade relations with the Islands, reached a climax in the development of national policy at the time of the Spanish-American War, following which sugar was received free of import duty from domestic Islands and the 20% preferential was established in favor of Cuba.

The Underwood Tariff Act of 1913 provided a gradual reduction in tariff to the point of free trade, with no duty on sugar after April 1916; but the effects of the First World War on the ability of tropical Islands to deliver sugar, because of the shortage of ships, caused Congress to reverse itself and to restore the tariff. The prospect of free trade had brought discouragement to the domestic industry, and short crops were the result. The Sugar Equalization Board set up during the War maintained stabilization in the sugar market; but, immediately following the War, foreign sugars gained control of the United States market, and the American consumers paid 25c and 30c a pound for sugar. From that time on, Congress gradually restored the protection of the tariff, until 1934 when the quota system was substituted.

The introduction of new varieties of seed-cane in Louisiana and the progressive application of improved farming practices and mechanization made it possible to produce a much greater tonnage of sugarcane and sugar per acre, so that without increasing its acreage Louisiana increased its tonnage considerably. The production in 1938 reached 484,000 tons. Thereupon the acreage had to be reduced to the basis of the quota of 420,000 tons for the Mainland Cane Area. The Louisiana industry was operating on this basis of acreage curtailment at the time of the declaration of war last December, and it was not possible adequately to prepare the acreage and to have a full planting, because sugarcane is planted in September and October of one year to be harvested in October, November, and December of the next year. Thus, the crop planted last Fall, before Pearl Harbor, will not be harvested until the late Fall of 1942.

The production of sugar in Louisiana in 1941

THE
SUGAR BULLETIN

414 Whitney Bldg., New Orleans

Marcel J. Voorhies, Editor

Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated The Louisiana Sugar Planters' Assn. The American Cane Growers' Assn. The Producers & Mfrs. Protective Assn. Subscription Price, 50 Cents per Year.

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE

**President, W. C. Kemper, Franklin, La.**

1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

EXECUTIVE COMMITTEE

W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

## Louisiana Production

**Signed reports, received by the AMERICAN SUGAR CANE LEAGUE from 66 mills in LOUISIANA equipped to make sugar show the 1941-42 Louisiana SUGAR (raw value) SYRUP, and MOLASSES productions to be as follows:**

| | | |
|---|---|---|
| Raws (96 test) | 504,351,342 | pounds |
| Granulated | 63,982,653 | pounds |
| Clarifieds | 5,461,322 | pounds |
| Washed Raws | 15,551,845 | pounds |
| Turbinados | 50,849,510 | pounds |
| Other Sugars | 4,287,148 | pounds |
| Total in Pounds | 664,483,820 | pounds |
| Total in Tons | 322,241.9 | (raw value) |
| Syrup | 1,705,220 | gallons |
| 1st Molasses | 2,142,987 | gallons |
| 2nd Molasses | 2,734,639 | gallons |
| Blackstrap | 21,560,072 | gallons |
| Total Cane Ground | 4,021,903 | short tons. |

amounted to 322,000 tons. The acreage planted this year and the prospects of the crop at this time indicate the possibility of a production of from 475,000 to 500,000 tons of sugar.

Naturally, preparations are being made for a maximum production in 1943. There is available in Louisiana sugarcane acreage sufficient to double production; but, before a sugarcane grower plants his crop, he must have definite assurances of mill capacity to grind his cane. The present Louisiana factory capacity, assuming a good growing season for sugarcane, will produce 600,000 tons of sugar in 1943. The quota system, with its very rigid restrictions on the production of sugarcane and the marketing of sugar, has not encouraged new-mill projects. Now, with priorities on the very scarce material required to set up a sugar-processing plant, it has been impossible to do any more than to install more modern equipment to improve efficiency. The shortage of sugar in the United States having been brought about because there is a shortage of ships for transporting sugar from the Islands, it is conceivable that a long war would make it desirable for the Federal Government to encourage and facilitate new construction to insure the sugar supply for consumers.

The labor required in the production of a crop of sugarcane and sugar amounts to more than 70% of the total cost. The creation of war industries and the expanded opportunities for employment have become so great that the Louisiana sugar industry is confronted with grave problems of labor shortage, like most agricultural enterprises whose operations are seasonal. Anticipating the crisis which will arise at the peak of the harvest season, the Louisiana sugar industry has already begun negotiations to insure an adequate labor supply by various means. The workings of the Manpower Board and the Selective Service Board are being considered with a view to permitting the trained and experienced labor and skilled employees of the sugar industry to save the crop and produce a maximum amount of sugar for the American table. It is hoped that a considerable number of cotton pickers may have completed their work in time to become available for cutting sugarcane. These workers are accustomed to plantation life and operations and, therefore, are more readily adjustable than transient labor.

There is one encouraging sign with respect to the ability of sugarcane growers to harvest all of the growing sugarcane. In recent years, mechanical harvesters have been developed which have the capacity of replacing approximately 70 laborers in the cutting of sugarcane. These harvesters also may be used for windrowing cane in the event of a severe freeze, which windrowing-practice conserves the sugar in sugarcane until it can be processed.

Sugar is known to be an essential food. It is rightfully called "the energy food." Besides, sugar and molasses are being used to produce more alcohol needed in the production of smokeless powder. The United States Government has recognized the importance of the continental crop which has the advantage that it does not have to depend upon ships to be delivered to American consumers. The Louisiana sugar industry entertains the hope and the confidence that the full power of the Federal Government will be used to guarantee the harvest of this very important crop.

The Office for Agricultural War Relations and the WPB have helped to secure needed fertilizers. The sugarcane growers have pledged themselves to a max-

imum effort towards the highest state of cultivation, in order to have the greatest possible production. With the shortage of rubber, cooperative programs are being worked out so that the Louisiana sugar industry as a whole can get full use from mechanized equipment existing within the industry, regardless of ownership. Plans are being made for operating tractors 24 hours a day in some instances. An industry project is now in progress, under sponsorship of the Commodity Credit Corporation and the WPB whereby 7,500 acres of sugar sorghum cane has been planted. Three factories in Louisiana will grind this sorghum cane and produce a sorghum syrup which will be delivered to distillers to determine whether such syrup can be used commercially as a raw material for the production of alcohol. Should this experimental project prove a success, this summer, the sugarcane growers are organizing to plant large acreages in sugar sorghum as a contribution to the production of alcohol and smokeless powder.

The First World War established the importance of maintaining the production of sugar in the continental United States, when it was demonstrated that complete dependence on foreign sources brings sugar prices of 25c and 30c per pound. The present World War is again demonstrating the importance of maintaining the production of sugarcane within the United States, as shown by the rationing program which is now in effect. There is national significance in the fact that local shortages of sugar occurred in the States along the Atlantic seaboard this Spring. There were no shortages in the South, where sugarcane is produced, or in the West, where sugar beets are produced; in fact, sugars from these continental areas have served to supply the deficits along the Atlantic seaboard. It seems entirely appropriate, therefore, that the American consumer be reminded to make proper record of the role that the domestic sugar industry plays in providing insurance that he will always have a supply of sugar available at a reasonable price.

## War Department Provisions In Regard To Applications For Commissions In The Armed Forces

In the May 15, 1942 issue of the *Sugar Bulletin*, we published, as a result of a conference held at Jackson Barracks, New Orleans, Louisiana, the detailed procedure in regard to occupational classifications under the Selective Training and Service Act of 1940.

The report included a statement that: "Those who are technically qualified for commissions in the Army or Navy will, in all probability, be given an opportunity to make applications for such commissions." For the benefit of those interested in this particular, the War Department circulars are as follows:

Army Regulations 140-5, Paragraph 55-C-3, provides as follows:

"Enlisted men on the active list of the regular Army who are called to active duty as reserve officers or who are tendered a commission in the Army, will be discharged from the service for the convenience of the government by their immediate commanding officers on a date immediately preceding the date of commencement of active commission service. Under the provisions of act of July 14, 1939, 53rd Statute 1001, an enlisted man who tenders himself for enlistment within six months after the termination of his commission service will, regardles of physical disqualification incurred or having its inception while on active duty, in line of duty, and regardless of whether a vacancy exists in the appropriate grade, be accepted and restored without loss of seniority to the grade held by him before being discharged to accept such commission and will be entitled to count active commission service in the Army as service for all purposes."

War Department Circular No. 169, Part 2, dated August 14, 1941, provides as follows:

"Pursuant to the provisions of Paragraph 60, AR 615-360, Army Commanders are hereby authorized to discharged enlisted men of the Army of the United States for the convenience of the government, in order to enable them to accept appointment as commissioned officers in the United States Navy or for enlistment in the Naval Reserve; provided, that before any such discharge shall be effected the Army Commander shall be in possession of documentary evidence from the United States Navy that such enlisted man is acceptable and will be appointed as a commissioned officer in the Navy, or enlisted in the Naval Reserve *for appointment to an Officer's Candidate class*, if discharged from the Army of the United States."

Normally, registrants whose occupational classifications are to no longer be continued, will have ample time between date of reclassification and induction to apply and receive commissions if War Department's action is favorable. Should a slight additional period be necessary, boards may postpone inductions within certain limitations.

Should unusual problems arise regarding applications for commissions, employers and registrants should keep their respective Local Boards fully informed and, a letter addressed to the State Director at Jackson Barracks, New Orleans, La., marked for the attention of Major J. Lester White, will give State Headquarters a chance to assist in expediting the processing of such applications.

Should inductions take place, however, prior to receipt of such commissions, the foregoing War Department Regulations provide for the discharge of such registrants from the armed forces in order that they may serve as commissioned officers in the Army or Navy.

## Contact Committee

A meeting of the Contact Committee of the American Sugar Cane League was held at Baton Rouge, Louisiana on May 13, 1942. Those present were:

*Contact Committee*: Stephen C. Munson, Chairman, Bronier Thibaut, Elliot Jones, E. A. Maier, Horace Nelson, M. J. Kahoe, Ben Devall, H. K. Bubenzer.

*Houma Experiment Station*: George Arcenaux, E. V. Abbott, E. K. Bynum, J. W. Ingram, Leo P. Hebert, L. G. Davidson, Ralph Mathes.

*Experiment Station Staff*: Harold T. Barr, I. L. Forbes, P. J. Mills, C. B. Gouaux, R. A. Ballinger, C. W. Edgerton, E. G. Brown, Sam H. Smith, E. C. Simon, W. J. Luke, Jr., A. L. Dugas, Paul S. Williamson.

*Extension Division Staff*: J. G. Richard, I. M. Heath, R. C. Calloway, C. E. Kemmerly, A. E. Camus, E. S. Landry.

*Visitors*: Marcel J. Voorhies, Arthur G. Keller,

R. T. Gibbens, Jr., John Burden, Lionel Kling, C. S. Churchill, E. J. Badeaux, D. J. Senette.

The meeting was called to order by Mr. Munson, Chairman, and Dr. R. A. Ballinger was asked to give a further discussion of his report on a cost study of large sugar cane plantations in Louisiana which was given at the last meeting of the Committee. Dr. Ballinger explained that the capital value figures used were obtained from two sources; from the cooperative mills and the Federal Land Bank Appraisals. After discussion, it was decided that there was no way to get a really satisfactory value and that both sets of figures would be used in future reports, as a basis for the studies.

The next report was given by Dr. Arthur G. Keller and this report dealt with certain phases of the 1941 program of the Audubon Sugar Factory. A summary of the results obtained follows, and a detailed discussion of each of these topics is presented in the mimeographed report.

1. Sucrose extraction does not seem to be adversely affected by excessive trash. Green trash does adversely affect the quality of the clarified juice.
2. Results are not sufficiently extensive to warrant a statement on the wear and tear on mill rolls caused by trash.
3. The elasticity of bagasse cannot be destroyed by compression alone.
4. The operation of smooth mill rolls was studied. Results were not satisfactory.

A discussion of the short course to be given this summer to train bench chemists brought out the following facts:

1. Girls and boys will be trained to do routine analyses and report work.
2. The course will begin June 1 and will continue for four weeks. The cost of the course will be $50.00 for boys and $60.00 for girls. This will include all expenses.
3. The girls and boys must have finished the seventh grade, and preferably have finished high school.
4. They would like to have at least 20 students, but can handle as many as 50.

A report was given by Mr. Harold T. Barr on engineering problems in the field. He reported that they were still working on the flame cultivator on Mr. Thibaut's property and that another cultivator is being sent to Houma by a commercial concern, and that the results so far looked very good. He also reported that Mr. Brown was still working on drainage and that they were nearing completion on a ditcher in the laboratory.

Mr. Barr then read a letter from the Office of Experiment Stations in Washington in which they said that the Office for Agricultural War Relations was attempting to get estimates as to the amount of agricultural farm machinery that will be needed by the end of 1943, and that they were starting now to allot quotas to different manufacturers for what they can manufacture for 1943. After discussion, it was decided that Mr. Barr should consult with Mr. Voorhies and Mr. Shaeffer and then make a report concerning this matter.

Mr. C. B. Gouaux presented his sugar cane test field report for the season of 1941, and mimeographed copies were distributed to those present.

The meeting adjourned at noon for lunch.

At the afternoon session, which convened at 2:00 P.M., there was a very full discussion concerning new varieties to be released. The following definite recommendations were made:

1. That the variety C.P. 34-120 be recommended for release.
2. That Mr. Voorhies write a letter to each cooperator stating that the grower can increase this variety by sucker transplanting, at his option and expense, until June 15, the total amount, including the increase, to be distributed under the Three-Way Agreement, and the cooperator to get one-fourth of the total.
3. That a survey be made, as was made last year, to determine what areas are disease free and what areas have chlorotic streak, and that if chlorotic streak is found within a half mile radius, the cane will be hot water treated; this survey to be conducted under the auspices of Dr. Abbott and Dr. Edgerton.

After discussion, it was further decided that Dr. Arceneaux and Mr. Simon should get together with their staff and make a report at the next meeting as to what varieties should be propagated.

Dr. Arceneaux reported that he and Mr. Elliott Jones have had summary tables mimeographed which they would like to present at the next meeting of the Committee.

After discussion, it was decided to hold the next meeting of the Committee at 10:00 A.M. on Thursday, June 11, at the Houma Station.

The meeting was then adjourned in order that those present might visit the University test fields.

## Conserve Rubber

**The following statement with respect to the rubber situation should be carefully read by every sugar cane producer using rubber tires for any purpose.**

Four leading war agency officials on May 22nd joined in a statement designed to clarify the facts about the severe rubber shortage.

Issued because many confusing and conflicting stories have been circulated about rubber, the statement points out that the shortage is extremely serious, reports to the contrary notwithstanding, and that no rubber of any kind can be spared for purposes not directly connected with the war effort.

Donald M. Nelson, chairman of the War Production Board; Arthur B. Newhall, Rubber Coordinator; Joseph B. Eastman, director of the Office of Defense Transportation, and Leon Henderson, Administrator of the Office of Price Administration and director of the WPB Division of Civilian Supply, all joined in the statement, which follows:

There has been a great deal of confusion about the rubber situation, much of it caused by optimistic stories about the availability of synthetic rubber at an early date, or the large amount of scrap rubber which can be reprocessed.

But there is little real basis for such optimism. Our rubber shortage is one of the worst materials shortages we face. We can spare no rubber of any kind for non-essential uses. Statements to the contrary are misleading, and do the country a great disservice, for the facts as we see them are grim, and we need one hundred per cent cooperation in conservation measures by the general public and by industry.

Before Pearl Harbor, it appeared that this country

had an adequate supply of rubber, in the light of the situation as it then existed. We had stockpiled substantial tonnages in anticipation of interruption in shipments from the Far East, and steps had already been taken to regulate civilian consumption.

Events following Pearl Harbor, however, created a wholly new series of problems. The president announced a new military program on January 6. This very greatly increased our military requirements for rubber. Then, our major sources of rubber supply were lost. In addition, our Allies were forced to look to the United States as a source of military rubber.

Thus, despite precautionary steps taken in 1941, it has become necessary to develop a rationing program for rubber which eliminates all but the most necessary uses.

War Production Board figures shows three facts:

1—We cannot spare any rubber to make new tires for ordinary passenger cars; the tires we do have must be strictly rationed to essential uses.

2—All the synthetic rubber we get must go to the war effort.

3—The most optimistic estimates for this year and next indicate no rubber for anything but the most essential uses.

Actually, the rubber shortage is far worse than most people seem to realize; the enemy controls 90 per cent of the world's rubber-producing areas, and every ounce of our stockpile is needed desperately for the armed forces.

Worst of all, the optimistic stories may keep us from recognizing what we are up against until too late. Our biggest stockpile of rubber is on our cars; these tires must be preserved. Autos shelved for the duration for lack of tires put more burden on already overcrowded buses and trolleys.

Every citizen can and must adopt a five-point conservation program:

1. Stop driving your car except when necessary; make it last.
2. Drive under 40 miles an hour.
3. Shift tires from wheel to wheel and inflate them properly.
4. If you drive to work, drive your friends and neighbors; car-pooling is essential.
5. Remember that rubber is precious; save it; every car is now a vital part of the nation's transportation system.

Needless driving today is unpatriotic. Deliberate waste of rubber helps the enemy. We call on Americans to ration themselves strictly.

## BACKGROUND

This is the situation which faces us: the amount of rubber which can be made available for civilian, industrial, and essential transporation purposes this year must be held down to not more than 150,000 tons, which is 79 per cent less than the 700,000 tons consumed for all civilian purposes in 1941. The actual current rate of use—10,000 tons a month—is 85 per cent less than the 1941 rate of civilian consumption.

The 1942 allotments do not include any rubber for new passenger car tires, and are restricted to articles essential to the civilian industrial economy, such as bus and truck tires, and certain industrial, medical, and health items.

It has been reported that some drivers are not taking conservation measures seriously, in the belief that eventually their tires will be requisitioned.

But if we wear out the tires on the 30 million passenger cars, the truck, bus, and train transportation systems of the nation will be swamped. On the other hand, if it is possible to preserve cars in the hands of their owners, it will be an advantage to all transportation and to the war effort. If the time should come when the Government had to call on civilians to sacrifice their tires, we know they would respond patriotically. In the meantime, no American should deliberately waste the mileage left in his tires.

Detailed estimates of our requirements and supplies, for military reasons, cannot be made public. But we have the figures, and the story they tell is a very serious one.

In spite of the excellent job the Army and Navy have done in re-arranging specifications to reduce the rubber consumption of military articles, our war machine still eats up huge amounts of rubber.

It has been necessary, therefore, for the Rubber and Rubber Products Branch of the War Production Board to curtail drastically the rubber permitted for civilian articles, and to establish new specifications to reduce the rubber content in essential articles. In addition, the Office of Price Administration has instituted a rationing program for tires, the armed services have adopted conservation regulations, and the Office of Defense Transportation has issued drastic regulations directed towards elimination by commercial operators of waste and unnecessary mileage.

The following figures show how the war effort demands rubber that must be made available; a medium tank requires 1,750 pounds; a gas mask, 1.8 pounds; a ten-ton pontoon bridge, 3,200 pounds; a half-ton truck, 125 pounds; a Flying Fortress, 1,250 pounds; the pneumatic rafts carried by planes, 29 pounds each.

So it goes. Rubber is indispensable. We do not usually connect rubber with a ship, but a 35,000-ton battleship alone requires 150,000 pounds—or enough to equip 2,000 passenger automobiles complete with spare tires.

Other factors in the rubber supply and demand situation are as follows:

### Synthetic

The War Production Board is making every effort to expand the production of synthetic rubber, and is investigating every possible new process, but all the information we have shows that every pound of synthetic rubber which this country will be producing at forced draught between now and the end of 1943 must be reserved for direct and indirect military purposes. None can be made available for the manufacture of tires for non-essential civilian purposes.

The War Production Board has set a goal of 800,000 tons as the production *rate* to be reached by the end of 1943. Of this, production of Buna S, a Butadiene type synthetic is to reach a *rate* of 700,000 tons by the end of 1943. The balance is made up of Butyl and Neoprene. But reaching a rate of 700,000 tons, of course, is a much simpler thing than actually producing that much rubber in a year.

The present program calls for production of over 300,000 tons during the calender year of 1943. In addition the Rubber Coordinator's office is studying the possibility of increasing the currently planned production of synthetic rubbers other than the Buna S. But many difficulties remain to be solved.

### Rubber Salvage

All old scrap rubber can be reclaimed and used over again. Reclaimed rubber can be mixed with crude rubber to form a compound usable in many products, military as well as civilian.

But we cannot process rubber that is in the basements or back yards or garages of the country. Old

tires, tubes, rubber shoes, hose, bathing caps and other articles must be turned in, in ever increasing quantities, if we are to maintain the capacity of reclaiming plants.

Since Pearl Harbor, the flow of scrap rubber to reclaiming plants has greatly diminished. It must be started again. Every American must see to it that every ounce of old rubber he owns gets into war channels. Scrap rubber can be sold to junk dealers or can be given to charitable organizations. This is a tangible contribution that the American people can make to the war effort. Refusal to do so is hoarding at the expense of our armed forces.

### Guayule

The wild Guayule shrub has been producing rubber for years in Mexico, and a small amount of cultivated Guayule has been growing in the United States.

A recent Act of Congres provided for the planting of 75,000 acres of Guayule in the Western Hemisphere. Pursuant to this Act, all available Guayule seeds in the United States have been planted, and from these seedlings will come not only a harvest of rubber bearing shrubs, but more seeds to increase the plantings. However, it will take four to six years to grow enough Guayule rubber to make an appreciable contribution to the supply.

Not more than 10,000 tons annually can be expected soon from Mexican Guayule.

### South America

Negotiations are in progress with all Latin American countries, and agreements have recently been made with Brazil, Peru and Nicaragua in which the United States will take the entire exportable surpluses of their rubber for the next five years. This will meet only a small part of our needs. Brazil will be able to ship this country from 10,000 to 15,000 tons of crude rubber this year, and, we hope, perhaps 25,000 to 30,000 tons in 1943. The Peruvian agreement is expected to provide between 6,000 and 10,000 tons over the five-year period.

In 1912, Brazil produced over 40,000 tons of rubber. In recent years, however the industry has deteriorated, and it will take considerable time to revive it. Most of the trees grow wild in the jungle, far from transportation facilities, and points of concentration are few and far between.

### Crude Rubber Production

Crude rubber producing areas, and the areas now axis-controlled, are as follows:

Rubber Production in 1940

| | |
|---|---|
| Malaya (area controlled by Axis) | 540,000 tons |
| Netherlands Indies (area controlled by Axis) | 536,000 tons |
| Ceylon (shipments uncertain) | 89,000 tons |
| French Indo China (area controlled by Axis) | 64,000 tons |
| Thailand (area controlled by Axis) | 44,000 tons |
| Sarawak (area controlled by Axis) | 35,000 tons |
| North Borneo (area controlled by Axis) | 17,500 tons |
| South America | 17,600 tons |
| India (shipments uncertain) | 11,500 tons |
| Burma (area controlled by Axis) | 9,600 tons |
| Liberia | 7,250 tons |
| Other African | 7,200 tons |
| Mexican Guayule | 4,106 tons |
| Nigeria | 2,903 tons |
| Philippines (area controlled by Axis) | 2,267 tons |
| Total | 1,390,000 tons |

(of which 1,250,000 tons, or 90 per cent, is in Axis controlled areas; and 1,350,000 tons or 97 per cent is either Axis controlled or originates in areas from which shipment is now uncertain.)

## Wage Rates For Harvesting 1942 Beet Crop

(*Official Release*)

The Department of Agriculture announced on April 9th that the minimum wage rates to be paid laborers for harvesting the 1942 sugar beet crop by producers who apply for conditional payments under the Sugar Act of 1937 have been increased 25 cents per ton of sugar beets above 1941 in all districts except California and northern Montana, where in general the increases are 30 cents per ton.

Officials pointed out that this is the first general beet wage revision since 1938 and that the increases are being made because of higher sugar prices, higher government payments, increases in general agricultural wages, and because of the rise in the cost of living.

The Sugar Act requires, among other conditions of payment to growers, that all persons employed on a farm in the production, cultivation, or harvesting of sugar beets be paid in full for such work at rates not less than those determined by the Secretary of Agriculture to be fair and reasonable, after public hearing and investigation. Public hearings were held in January in Detroit, Michigan; St. Paul, Minnesota, Billings, Montana; Pocatello, Idaho; Denver, Colorado; and Sacramento, California.

Specific rates for the various areas follow:

District I—Ohio, Michigan, Indiana, and Wisconsin:

Topping: On a time basis 55 cents per hour. On a piecework basis:

| Net tons per acre | Rate per ton | Net tons per acre | Rate per ton |
|---|---|---|---|
| 3 or below | $1.75 | 10 | $1.16 |
| 4 | 1.55 | 11 | 1.14 |
| 5 | 1.40 | 12 | 1.12 |
| 6 | 1.31 | 13 | 1.10 |
| 7 | 1.25 | 14 | 1.08 |
| 8 | 1.21 | 15 | 1.06 |
| 9 | 1.18 | 16 or above | 1.05 |

(The rate for all fractional tonnages between 3 and 16 tons rounded to the nearest tenth of a ton is to be in proportion within each interval.)

District II—Minnesota and Iowa:

Topping: $1.15 for each ton up to and including 7 tons per acre plus $1.05 for each ton per acre above 7 tons, with a minimum of $6.90 per acre.

District III—Nebraska, Colorado, Kansas, and Southern Wyoming:

Topping: $1.05 for each ton up to and including 12 tons per acre plus 95 cents for each ton per acre above 12 tons, or 55 cents per hour.

District IV—South Dakota:

Topping: $1.05 for each ton up to and including 12 tons per acre plus 95 cents for each ton per acre above 12 tons, or 55 cents per hour.

District V—Southern and Eastern Montana, and Northern Wyoming:

Topping: $1.05 for each ton up to and including 12 tons per acre plus 95 cents for each ton per acre above 12 tons.

District VI—Western Montana:

Topping: $1.05 for each ton up to and including 12 tons per acre plus 95 cents for each ton per acre above 12 tons.

District VII—Northern Montana:

Topping and loading: $1.25 for each ton up to and including 12 tons per acre plus $1.15 for each ton per acre above 12 tons. When topping and loading are performed by different persons, the rate up to and including 12 tons per acre is to be $1.05 for topping and 20 cents for loading and the rate above 12 tons per acre is to be 95 cents for topping and 20 cents for loading.

District VIII—Utah, Idaho and Oregon:

Topping and loading: On a time basis, 55 cents per hour.

On a piecework basis:

| Net tons per acre | Rate per ton | Net tons per acre | Rate per ton |
|---|---|---|---|
| 6 or below | $1.55 | 13 | $1.19 |
| 7 | 1.48 | 14 | 1.16 |
| 8 | 1.41 | 15 | 1.14 |
| 9 | 1.35 | 16 | 1.12 |
| 10 | 1.30 | 17 | 1.11 |
| 11 | 1.26 | 18 or above | 1.10 |
| 12 | 1.22 | | |

When topping and loading are performed by different persons, 30 percent of the above rates is to be paid for loading. (The rate for all fractional tonnages between 6 and 18 tons rounded to the nearest tenth of a ton is to be in proportion within each interval.)

District IX—Washington:

Topping: 90 cents per ton, or 55 cents per hour.

Loading: 35 cents per ton, or 55 cents per hour.

District X—Southern California:

Topping and loading: On a time basis, 50 cents per hour.

On a piece work basis:

| Net tons per acre | Rate per ton | Net tons per acre | Rate per ton |
|---|---|---|---|
| 4 or below | $2.43 | 15 | $1.12 |
| 5 | 2.13 | 16 | 1.08 |
| 6 | 1.88 | 17 | 1.05 |
| 7 | 1.70 | 18 | 1.02 |
| 8 | 1.57 | 19 | 1.00 |
| 9 | 1.47 | 20 | .99 |
| 10 | 1.39 | 21 | .98 |
| 11 | 1.32 | 22 | .97 |
| 12 | 1.26 | 23 | .96 |
| 13 | 1.21 | 24 | .95 |
| 14 | 1.16 | 25 or above | .94 |

(The rate for all fractional tonnages between 4 and 25 tons rounded to the nearest tenth of a ton is to be in proportion within each interval.)

District XI—Northern California:

Topping and loading: On a time basis, 55 cents per hour.

On a piece work basis:

| Net tons per acre | Rate per ton | Net tons per acre | Rate per ton |
|---|---|---|---|
| 4 or below | $2.53 | 15 | $1.22 |
| 5 | 2.23 | 16 | 1.18 |
| 6 | 1.98 | 17 | 1.15 |
| 7 | 1.80 | 18 | 1.12 |
| 8 | 1.67 | 19 | 1.10 |
| 9 | 1.57 | 20 | 1.09 |
| 10 | 1.49 | 21 | 1.08 |
| 11 | 1.42 | 22 | 1.07 |
| 12 | 1.36 | 23 | 1.06 |
| 13 | 1.31 | 24 | 1.05 |
| 14 | 1.26 | 25 or above | 1.04 |

(The rate for all fractional tonnages between 4 and 25 tons rounded to the nearest tenth of a ton is to be in proportion within each interval.)

If growers in districts for which only piece rates are specified wish to employ labor on an hourly basis, or if the use of special machine methods of harvesting reduce the amount of labor required as compared with the common method in use, the minimum wage rate is to be that agreed upon between the producer and the laborer. However, in both cases the rate must be approved by the State AAA committee as being equivalent to the piece rate specified for such work in the determination.

When wage rates higher than the foregoing are agreed upon between growers and laborers the payment of such rates is required.

The determination further provides that the producer is to furnish to the laborer, without charge, the accessories customarily supplied by him, such as a house, garden plot, etc.

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

**Help Our Country**
**Buy**
**WAR BONDS**
**and**
**STAMPS**

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

LAMBORN & COMPANY, INC.
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

LE BOURGEOIS BROKERAGE CO.
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
HARRY L. LAWS & CO., INC.
Brokers and Distributors
SUGAR and MOLASSES
SUGAR FUTURES
American Bank Building New Orleans, La.

GAY, SULLIVAN & CO., INC.
SUGAR
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

STAUFFER, ESHLEMAN & CO., LTD.
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
CYANAMID
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

INDUSTRIAL LUBRICANTS

BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
STANDARD OIL CO. OF LA.

FOR SUGAR CANE FINANCING
STATE AGRICULTURAL CREDIT CORPORATION, INC.
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

AMERICAN MOLASSES CO.
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LEGardeur Frank Youngman
R. J. LEGARDEUR & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

PENICK & FORD, LTD., INCORPORATED
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

STANDARD SUPPLY AND HARDWARE CO., INC.
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

E. A. RAINOLD, INC.
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

**Annual Statistical Issue**

# THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

We stand for the encouragement of Home Industries as against foreign Competition

**Vol. 20** NEW ORLEANS, LA., JUNE 15, 1942 **No. 18**

## Disease Testing and Initial Seedling Selection Work at the Houma Station During 1940 and 1941

*(By E. V. Abbott, Associate Pathologist and Eaton M. Summers, Assistant Pathologist Division of Sugar Plant Investigations, Bureau of Plant Industry, United States Department of Agriculture)*[1]

The present article is a continuation of previous progress reports[2] on the disease testing and initial sugarcane seedling selection work done by the pathologist at the Houma station. The experience of the past 2 seasons, when some of the commercial varieties have not performed up to their expected standards, has emphasized the importance of obtaining varieties resistant to the weaknesses inherent in those now grown, but it has also brought into prominence the difficulties that must be confronted in the varietal improvement work in combining resistance to the principal diseases with required standards of type, maturity, tonnage, resistance to insect damage and to cold, and all of the complex factors entering into the makeup of the environment of sugarcane in Louisiana. State average yields in 1940 reached the lowest point since the failure of the old Noble canes in the early 20's, and caused many growers to be apprehensive that the present commercial varieties were failing as those of the past have done. However, with the return of more normal seasonal conditions, the varietal situation is seen to be less critical than it appeared to some a year ago. Nevertheless, there is still room for improvement in the assortment of varieties now available to growers, and it is the purpose of this article to bring up to date the reports on the work being done by the Bureau of Plant Industry toward the production of varieties that will lessen the losses from diseases.

As long as Co. 281 and Co. 290 are grown, mosaic will remain a problem, but one which experience has shown can be largely met with the proper effort in roguing seed cane supplies to hold the disease at a minimum. Renewed interest in roguing of Co. 281 has been apparent during the past year, and in general the results achieved have been commensurate with the efforts expended. Almost complete control has been achieved on one of the larger plantation units where a systematic and persistent roguing campaign has been carried out.

Roguing of Co. 290 has come to be the accepted thing in the Teche section, where this variety predominates. As a result of 5 years of commercial roguing by specialists and an excellent program by the County Agents, mosaic in this area has been reduced very materially. The necessity for roguing has diminished correspondingly until on many farms little more than periodic inspection is required. Where satisfactory maturity is obtained with C.P. 29/116, substituting it for Co. 290 will solve the mosaic problem, and to a large extent at least, that of seed deterioration experienced with the latter variety. Only a trace of mosaic has been recorded on C.P. 29/116, and deterioration of seed cane from red rot or other causes has generally been unimportant. The rate of spread of chlorotic streak in it has been relatively low thus far, but to this disease C.P. 29/116 is less resistant than Co. 290. Where C.P. 29/103 is considered as a substitute for Co. 290, attention should be given to chlorotic streak control, especially on heavy soils, for the former variety is susceptible to and very severely damaged by this disease. Attention should also be given to the greater susceptibility of C. P. 29/103 to inversion of sucrose when windrowed. While windrowing of Co. 290 is feasible as an emergency measure, windrowing of C.P. 29/103 would be extremely hazardous. C.P. 29/103 is resistant to mosaic.

In addition to some red rot damage to Co. 290, this disease has interfered with obtaining satisfactory plant-cane stands of other varieties, particularly C.P. 29/320, and in combination with root rot, it has caused damage to C.P. 28-19. Frequently the losses from red rot have been associated with planting under unfavorable conditions, extremes of weather, or, in the case of C.P. 29/320, with severe insect

THE SUGAR BULLETIN

414 Whitney Bldg., New Orleans

Marcel J. Voorhies, Editor

Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
Subscription Price, 50 Cents per Year.

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE

President, W. C. Kemper, Franklin, La.

1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

EXECUTIVE COMMITTEE

W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

injury. The tendency of red rot to team up with other enemies of sugarcane often makes it difficult to say definitely which is the principal culprit.

The importance of root rot, particularly during the seasons of 1940 and 1941, when prolonged cool and wet weather in the spring made conditions ideal for this disease, is probably less fully appreciated by growers than is that of mosaic and red rot, the symptoms and effects of which are more readily apparent. It may be said, however, that root rot is an important cause of poor stands and delayed spring growth of susceptible varieties, and that obtaining varieties resistant to it continues to be one of the important problems of the industry, particularly for heavy and poorly drained soils.

## Disease Reaction of Unreleased Varieties at the Test Fields

In the 1940 report the disease reactions of several of the more promising unreleased varieties were discussed. Since that time, one of these, C.P. 33/243, has been released. This was done primarily because many growers felt that, after weighing its good qualities against its known weaknesses, it might prove of value in some localities, and that individual growers could determine its merit for their own particular conditions. Susceptibility to red rot appears to be the greatest potential disease hazard of the variety, although it has not caused important stand losses in plantings on light soil. Mosaic has been of negligible importance in it, and field tests during the past 2 years indicate that it is less susceptible to chlorotic streak than it appeared to be earlier. Where this disease is found in the variety it should be rogued out, a measure which thus far appears to be adequate for control.

C.P. 34/120, which was mentioned in the report of 2 years ago, will probably be released in 1942. This is an erect-growing cane of medium barrel, with a spreading top similar to that of Co. 290. At the Houma station and its cooperating tests fields it has shown satisfactory resistance to red rot and root rot, and has remained free of mosaic. During 1941 the rate of spread of chlorotic streak into it indicates that the variety is about as susceptible as C.P. 28/19 to this disease, and that roguing seed cane will thus probably be necessary, and certainly desirable, in areas where chlorotic streak is established. The extent to which germination and yields of the C.P. 34/120 will be reduced by the disease remains to be determined.

A third variety discussed in the 1940 report is C.P. 33/253. This is an erect-growing, small-barrel cane with consistently good sucrose and yield under most conditions.[3] It is susceptible to mosaic, however, and largely because of this it has been discontinued from the test fields except on muck soil at Clovelly Farms in lower Lafourche Parish, where it shows promise. There it has remained free of mosaic. Elsewhere in the district, the status of mosaic in the variety is about as indicated in the 1940 report, i.e., spread has been negligible at some test fields (principally west of the Atchafalaya) and considerable at others. The variety is commercially resistant to red rot and root rot, but is susceptible to chlorotic streak.

C.P. 34/79 continues to attract the interest of many growers because of its fine type, the promise it has shown in agronomic tests[4], [5], and the fact that Dr. J. I. Lauritzen has found it possesses windrowing qualities almost if not as good as Co. 281.[6] Susceptibility to some strains of the red rot fungus was mentioned in the 1940 report as a possible serious weakness, although one that has not yet caused important stand losses in plant cane. Poor stubbling, approaching failure in some instances, during the past two seasons is undoubtedly a serious drawback to considering it for commercial culture. Another weakness that has developed since the 1940 report is the variety's high susceptibility to chlorotic streak. To this disease it has proved more susceptible than any other included in the chlorotic streak tests, and in small scale experiments, germination was greatly reduced by it. The accumulated evidence, therefore, indicates that large-scale commercial utilization of this variety would be hazardous.

Several varieties now in an advanced stage of testing at the agronomy test fields have not been discussed in previous reports of this series. These are C.P. 31/509, 33/372, 33/409, 34/1 and 34/21.

C.P. 31/509 has an excellent disease record except for its susceptibility to chlorotic streak. To this disease it has proved to be as susceptible as C.P. 29/320, which means that control measures would have to be resorted to for successful commercial use of the variety were chlorotic streak has become established. It is resistant to root rot and red rot, and very resistant to mosaic, having shown a trace of this disease in only one test.

C.P. 32/206 is of interest because of Dr. Lauritzen's findings that windrows about as well as Co.

281[8], and the results of agronomic tests[7], in which it outyielded this variety in sugar per acre as both plant cane and stubble. Since it may thus be considered a possible competitor of Co. 281, the relative resistance to mosaic of the 2 varieties becomes an important consideration. C.P. 32/206 has shown a trace of mosaic in several plantings, but in the 4 years it has been at the test field infection has not exceeded 2 percent in any instance. Infection in Co. 281 in the same tests was from 50 to 100 percent. In this respect, therefore, C.P. 32/206 offers a distinct advantage over Co. 281. It is about equal to the latter in root rot susceptibility, which indicates that for best results in should be confined to light land. Its red rot record is satisfactory. Surveys made in the spring of 1942 indicate that it is more susceptible to chlorotic streak than Co. 281.

C.P. 33/372 is a good type cane that starts off early in the spring and shades the row about as early as Co. 290. Its record on red rot and root rot, to both of which it is susceptible, indicates that it should be confined to light soils. It has generally remained free of mosaic, with only a low percentage having been found in some plantings. Chlorotic streak has not been recorded on it.

C.P. 33/409 is a very vigorous cane of erect habit with a moderately spreading top, but below desirable limits in barrel size. It has an excellent disease record. It is resistant to red rot and root rot, stubbles well, mosaic has not been recorded on it in the Houma tests, and it has shown only a trace of chlorotic streak.

C.P. 34/1 is resistant to red rot, moderately so to root rot, has remained free of mosaic, has shown only a trace of chlorotic streak, and has a good record for stubbling. C.P. 34/21 is slightly more susceptible to root rot and red rot than C.P. 34/1, but may be considered commercially resistant to both. Although it has shown a trace of mosaic and chlorotic streak, neither disease has given indications of being important on it thus far.

## Recent Test Field Introductions

Seven varieties of the 1934 C.P. series were introduced at the test fields in 1940: C.P. 34/53, 34/54, 34/75, 34/86, 34/92, 34/115 and 34/139.

Dr. Lauritzen's results[9] indicate that two of this list, C.P. 34/54 and 34/115 may have windrowing possibilities. In preliminary tests C.P. 34/115 showed high resistance to inversion of sucrose comparable with Co. 281, while C.P. 34/54 was not as good as Co. 281 in this respect.

Only two of the group have shown mosaic. Maximum infection of 10 percent has been recorded for C.P. 34/54, and 30 percent in C.P. 34/75. The disease will have to be watched in the latter variety, for it seems to be spreading each year.

While all 7 of the above group have shown commercial resistance to red rot in field plantings and in most of the laboratory tests, 4 of them, C.P. 34/53, 34/75, 34/86, and 34/115, proved very susceptible to at least one strain of the red rot fungus (C.P. 34/86 to several strains) when they were inoculated separately with several strains obtained from rotted seed cane of the present commercial varieties. This indicates possible trouble from this disease should the right strain of the fungus find conditions favorable for multiplying on a variety particularly susceptible to it, and emphasizes the importance of continued observation of them for indications of increasing damage from this disease.

Preliminary root rot ratings indicate that all of the group are commercially resistant to this disease, at least for light soils. C.P. 34/53 is considered the most susceptible of the 7, being about equal to Co. 281 in this respect.

All of the group have shown at least a trace of chlorotic streak, and one, C.P. 34/86, proved quite susceptible to it in the 1941 tests.

In the fall of 1941, the following 16 varieties were introduced at the test fields: C.P. 31/551, 33/310, 33/485, 34/141, 34/143, 35/14, 36/17, 36/19, 36/55, 36/62, 36/70, 36/75, 36/85, 36/94, 36/105 and 36/191.

Thus far, only 3 of these have shown mosaic in the nurseries at Houma, C.P. 34/143 and 36/19 up to 10 percent, and 36/105 a trace of the disease. Several of them are border-line with respect to red rot resistance, and field tests will be necessary to determine the importance of this disease. On heavy soil, 7 of the 16 have been classed as susceptible to root rot, i.e., about equal to Co. 281. There are C.P. 33/485, 34/141, 34/143, 36/17, 36/19, 36/70 and 36/94.

With the exception of C.P. 36/105, for which sufficient seed was not available, the 1940 and 1941 test field introductions have been planted in tests at 2 localities where their susceptibility to chlorotic streak can be studied under conditions favorable for secondary spread of the disease.

It may be of interest to members of the American Sugar Cane League to know that 4 varieties now at the test fields, C.P. 34/1, 34/21, 34/86 and 34/92, came from a lot of seedlings that were propagated in 1935 at the Houma station through a grant of funds from the League. These seedlings were in excess of what could be cared for at Canal Point, and except for the generosity of the League, would have been lost.

## Total Seedlings Tested and New C.P. Numbers Assigned

In table 1 is shown a summary of the seedlings tested by the pathologists at Houma during 1940 and 1941. By "C.P. candidates" is meant those seedlings that have been under observation for at least 2 years, and are receiving final consideration for assignment of C.P. numbers on the basis principally of disease resistance, type, and sucrose. They represent liberal selections made earlier from much larger number of seedlings at Canal Point, Fla., and Houma. Proven susceptibility to any of the diseases does not necessarily disqualify a seedling if it is particularly outstanding with respect to sucrose content or indicated yield, but an effort is made to eliminate those with disease weaknesses that are of only aveage quality in other respects. This final selection is made jointly by the cane breeder, Dr. G. B. Sartoris, and the pathologists, with the advice of Mr. B. A. Belcher, locally in charge of the U. S. Sugar Plant Field Laboratory at Cairo, Ga., on the selection of seedlings to be tested for sirup production. The available seed supply of each variety is divided for distribution to the agronomists at the Louisiana Agricultural Experiment Station at Baton Rouge, and at the U. S. field stations at Houma and Cairo. The number of seedlings turned over to the agronomists each year represents, as a rule, approximately 2 percent of the total that has gone through the preliminary disease and other tests.

The "single stool progenies" in table 1 are those seedlings that have been grown from true seed at Houma, and of which only the original single stool was available for study. Selections from them will become C.P. candidates in their second year of testing.

**Table 1. Summary of seedlings tested and C. P. numbers assigned in 1940 and 1941 at the U. S. Sugar Plant Field Station, Houma, Louisiana**

| Classification of Seedlings | Number examined in field | Number analyzed for sucrose | Number tested for red rot | Number inoculated with mosaic | C. P. Numbers assigned |
|---|---|---|---|---|---|
| Data for 1940: | | | | | |
| C. P. candidates | 2,493 | 813 | 411 | 768 | 34 |
| Single stool progenies: | | | | | |
| From commercial crosses | 1,615 | 12 | ---- | 95 | -- |
| Turkestan hybrids | 1,704 | 139 | ---- | 180 | -- |
| Florida Station seedlings | 24 | 13 | ---- | ---- | -- |
| Foreign and parent varieties | 686 | 9 | 1 | 53 | -- |
| Grand total in 1940 | 6,522 | 986 | 412 | 1,096 | 34 |
| Data for 1941: | | | | | |
| C. P. candidates | 1,507 | 676 | 268 | 486 | 65 |
| Single stool progenies of commercial crosses | 16,606 | 3,201[1] | ---- | 21,055[2] | -- |
| Turkestan hybrids: | | | | | |
| 1st Nobilization crosses | 1,074 | 80 | ---- | 850 | -- |
| 2nd Nobilization crosses | 497 | 151 | 109 | 489 | -- |
| 3rd Nobilization crosses | 991 | 100 | ---- | 1,000[2] | -- |
| Florida Station seedlings | 3 | 2 | ---- | ---- | -- |
| Foreign and parent varieties | 104 | ---- | 22 | 24 | -- |
| Grand total in 1941 | 20,782 | 4,210 | 399 | 23,904 | 65 |

[1] Analyzed by hand refractometer.
[2] Inoculated in pots in the greenhouse prior to transplanting to the field.

The "foreign and parent varieties" are those being tested to aid the cane breeder in selecting disease resistant varieties suitable for breeding stock.

It will be noted from the table that C.P. numbers were assigned to 99 new varieties in 1940 and 1941. The numbers were:

In 1940—C.P. 36/160 to 36/192, and 37/13; total 34.

In 1941—C.P. 34/167, 36/193 to 36/210, 37/14 to 37/19, and 38/1 to 38/40; total 65.

Sixty-two of the total of 99 are from a progeny of 7000 seedlings of the parentage P.O.J. 2725 x C.P. 1165. This cross in the past has produced 3 commercial varieties, C.P. 29/103, 29/116 and 29/120, and a considerable number of very promising seedlings that in one respect or another have not quite met the required standards. Dr. Lauritzen has found that several of them possess windrowing qualities, and the cross is considered a promising source of windrowing canes.

In general, the seedlings from this cross are of good commercial type. They show a low incidence of mosiac, on the whole they are quite resistant to root rot, and while but few of them are highly resistant to red rot, the majority of the selections meet commercial requirements in this respect. Several of those that have been tested for chlorotic streak, however, are susceptible to this disease.

Six of the new C.P. numbers are from the cross Co. 281 x U. S. 1694, the parentage of C.P. 28/11, 28/19 and 33/243. This cross yields many seedlings of early maturity, but the incidence of mosiac is rather high, and they are predominantly of poor type. It produces some resistant, and some very susceptible, to red rot and root rot. However, in spite of certain disadvantages, the chances of obtaining a superior individual from the cross are such that continuing to test large numbers of seedlings from it is desirable.

In addition to the Florida State Agricultural Experiment Station seedlings, F. 31-641 and F. 31-962, mentioned in the 1940 report, F. 31-762 has been distributed to the agronomists for testing. The latter variety has not contracted mosaic for either artificial inoculation or natural spread in the nurseries at Houma, and otherwise has a good disease record except for high susceptibility to some strains of the red rot fungus in laboratory tests. However, there has been no appreciable injury to seed cane by this disease in the nursery plots. In growth and stubbling it has been about equivalent to Co. 290, and in sucrose, based on analyses of 10-stalk samples, it exceeded that variety as plant cane and as first stubble.

F. 31-962 developed a trace of chlorotic streak during 1941 in both plant-cane and stubble of a plantation increase planting of the variety. No spread of the mosaic mentioned in the 1940 report was detected.

## Seedling Progeny Tests

Exceptionally favorable breeding seasons at the Bureau of Plant Industry's field station at Canal Point, Fla., in 1940 and 1941, provided the cane breeder with an unusually large number of seedlings from crosses that in past years have produced the commercial varieties now bearing the C.P. label, as well as many of the most promising of the unreleased seedlings at the test fields. In accordance with now established policy, the true seed from these crosses in excess of that which could be handled at Canal Point, was sent to Houma, where it was germinated and the seedlings subsequently potted and transplanted to the field. In 1941, 25,039 seedlings of the 1940 series, i.e., bred during the period November 1940 to February 1941, were handled in this manner, of which 19,980 were from commercial crosses, 4,032 were from crosses at least one parent of which has proved valuable in breeding, and the remaining 1,027 were from second and third generation nobilizations of the Turkestan cold-resistant wild canes. The principal commercial crosses in this group were P.O.J. 2725 x C.P. 1165, Co. 281 x U.S. 1694 (both discussed earlier), Co. 281 x C.P. 27/34 (the parentage of C.P. 29/320), Co. 281 x C.P. 27/108 (the parentage of the early-maturing F. 31-962), Co. 281 x C.P. 1161, and Co. 281 x C.P. 1165.

The first test to which the seedlings handled in this manner are subjected is that for mosaic resistance. When the plants are about 6 inches tall in the pots in the greenhouse, they are inoculated by the pinprick method with the mosaic virus. In 1941, 21,055 seedlings were so inoculated, and the approximately 14 percent that subsequently showed symptoms of the disease were discarded prior to transplanting to the field. Inoculating with mosaic in this early stage is admittedly severe treatment, but in view of the importance of this disease and the large number of seedlings to be handled with not unlimited funds and land, eliminating the mosaic-susceptible ones in an early stage seems justified.

In excess of 16,000 of the above seedlings survived after transplanting to the field, all of which were in-

dividually examined in the fall with the view of selecting those that were of commercial type. Hand refractometer Brix readings were made by Dr. Sartoris and the junior author on 3200 of them that showed the best growth and type, and of these, 1588 were replanted in 8-foot plots, where they will be further studied in 1942. It is anticipated that an equal number of new selections will be made from the original single stools in the fall of 1942, in addition to those replanted last fall.

In the fall of 1942, the selections from this group will be analyzed for sucrose, and those of satisfactory quality in this respect will be inoculated artificially with red rot. Those that are very susceptible to this disease and of only average sucrose will be discarded; but the high sucrose number, even though they are very susceptible to red rot, will be retained for further study in the field to determine whether they may not be utilized under some conditions, such as on muck soil, or elsewhere where red rot is not a great hazard. The varieties combining a satisfactory degree of resistance to red rot with other desired qualities will be replanted in 12-foot plots, from which final selections will be made for assignment of C.P. numbers in the fall of 1943.

The procedure through which the seedlings pass is outlined in some detail in order that growers may realize the time inevitably involved in carrying a variety from the hands of the cane breeder to the test plots of the agronomists. To recapitulate in brief: A cross made late in the winter of 1940 produces seed in January 1941, which is harvested immediately and planted in flat of steamed soil in the greenhouse. In April or May the plants are ready to be transplanted to the field, where by November the more vigorous individuals will have produced from 3 to 10 stalks of sufficient maturity for seed cane. The selections are increased to 8-foot plots in 1941, the first selection from normal plant-cane is made in 1942, and in 1943, with both plant-cane and stubble results on which to base decisions, C.P. numbers can be assigned.

In 1942, a lot of some 18,000 seedlings of the 1941 Canal Point series is being handled in the same manner as described above, practically all of which are from important commercial crosses.

## Turkestan Hybrid Seedlings

The work being done by the Bureau of Plant Industry in breeding for cold resistance in sugarcane has been outlined to readers of The Sugar Bulletin by Dr. E. W. Brandes in previous articles[10]. Seedlings from the first nobilization of the cold-resistant, wild Turkestan forms of *Saccharum spontaneum* have been under study at Houma for 3 years, while some from the second and third nobilizations were available in 1941.

As would be expected, the seedlings from the first nobilization crosses are not of commercial promise in type and tonnage, although they are vigorous in stooling, and several have shown surprisingly high sucrose. Of a total of 103 analyzed from the 1500 studied in 1940, 23 analyzed better than 12.00 percent sucrose, 8 better than 13.00, and 1 better than 14.00, with Co. 281 as the control variety analyzing 15.19. Thirty of the 103 were replanted for further study. At the request of Dr. Sartoris, and in cooperation with the Louisiana Agricultural Experiment Station, they were also planted at the North Louisiana Experiment Station at Calhoun, and at the Bureau of Plant Industry's sugarcane station at Meridan, Mississippi, where they will receive a more severe test of their cold resistance than could be obtained at Houma.

Of 497 hybrids from the second nobilization available for study in 1941 at Houma, many approached commercial type in growth, stooling, and stalk size, although in general they were inferior to the commercial varieties in these respects. Sucrose analyses were made of 151 selected as possible commercial types. They ranged from 4.43 to 14.63 percent sucrose, compared with 12.96 for Co. 281 and 12.35 for Co. 290 grown under the same conditions. Their average stalk weight equalled that of Co. 281. Following the analyses and other tests, 4 were considered sufficiently promising as commercial types to warrant replanting them as C.P. candidates.

Unfortunately, the first freezes of the 1941-42 winter season were too severe to permit of any differentiation among these hybrids on the basis of resistance to cold. Following the minimum temperature of 25° F. on January 8, 1942, the seedlings were examined but all had apparently been killed to the ground. This was followed by a 19° minimum on the 11th, thus eliminating the chances of determining whether any lateral buds had survived the 25° temperature, which might have been possible had a few days of warm weather intervened between the 2 freezes.

Approximately 1000 seedlings from the third nobilization crosses were grown at Houma in 1941, but they were set in the field too late in the spring to permit any definite appraisal last fall. They will be studied further as stubble in 1942.

From the standpoint of diseases, the Turkestan hybrids have shown rather high susceptibility to mosaic in the first nobilization crosses, up to 60 percent of those studied developing the disease as plant-cane from natural or artificial infection. However, there was a strong tendency to recover from the disease as stubble, many recovering entirely, while others had only one or two shoots with mosaic. Some of the seedlings are very susceptible to the leaf disease, brown spot, and to Cytospora sheath rot, both minor diseases on the present commercial varieties. In the second nobilization crosses the average number developing mosaic dropped to 37 percent of the total, and in the third nobilization, to 23 percent. This is evidence that as the hybrids approach commercial type in the nobilization process, the proportion of mosaic-resistant individuals is being materially increased.

---

[1]The writers are indebted to L. G. Davidson for the sucrose determinations referred to in this article, and to Robert L. Tippett and Arthur Pellegrin for assistance in red rot and mosaic inoculations.

[2]Rands, R. D., Abbott, E. V., and Summers, E. M. Disease resistance tests and seedling selections in 1938 and 1939. Sugar Bulletin 18(15):5-9, May 1, 1940. (See this article for reference to earlier reports in the series.)

[3]Arceneaux, George, Hebert, Leo, P., and Krumbhaar, C. C. Results of variety tests in Louisiana during 1940. Sugar Bulletin 19(18):94-100, June 15, 1941.

[4]Loc. cit.

[5]Gouaux, C. B. Sugar cane test field report season of 1940. Sugar Bulletin 19(18):100-104, June 15, 1941.

[6]Unpublished results of deterioration studies at the Houma station.

[7]Loc. cit.

[8]Loc. cit.

[9]Loc. cit.

[10]Brandes, E. W. Three generations of cold resistant sugarcane. Sugar Bulletin 18(4):3-5, Nov. 15, 1939.

Brandes, E. W., and Matz Julius. Problems and progress in breeding temperate zone sugarcane. The Sugar Journal 2(6):3-6, 1939.

Brandes, E. W. Survival of wild sugarcane buds exposed to below zero (F.) temperatures. Sugar Bulletin 18(16):3-4, May 15, 1940.

LOUISIANA STATE UNIVERSITY

# Sugar Cane Test Field Report Season of 1941

*By C. B. Gouaux, Louisiana State University and Agricultural and Mechanical College—Agricultural Experiment Stations, W. G. Taggart, Director.*

## Propagation of Cane Varieties

In the fall of 1940, the Experiment Station following its customary practice of rapid propagation of promising unreleased cane varieties, made increased plantings of C.P. 33-243 and C.P. 34-120 at the Sugar Experiment Station, test fields and with cooperating cane farmers in the State. At a meeting of Sugar cane farmers held in Houma on May 22, 1941, both varieties were recommended to be released for commercial planting. However, later it was decided to release only one variety, C.P. 33-243, in 1941, and build up the seed cane supply of C.P. 34-120 by propagation methods for possible commercial release in the fall of 1942.

From the increases of the Experiment Station test fields and cooperators, seed cane from about 45 acres of C.P. 33-243 was available for commercial distribution in the fall of 1941.

During the spring, summer and fall, by the various methods of cane propagation, transplanting seed cane pieces, stubble pieces, sucker planting, single-eye planting, summer and fall planting, the approximate three acres of C.P. 34-120 was increased to about fifty acres, which is widely distributed throughout the sugar cane parishes on over twenty cane farms and eight test fields.

The propagation of promising unreleased sugar cane varieties was carried out on a much more elaborate and extensive scale in the fall of 1941 at the Experiment Station test fields. Substantial increase plantings were made on the basis of variety adaptability to soils, localities and on favorable comparative performance with the best standard varieties. The following cane varieties, accordingly, have been planted on a larger plot or small field block scale in order to provide greater quantities of seed cane, for possible commercial use, and also for securing additional data and information on their performance in comparison with field varieties: C.P. Nos. 33-372, 33-425, 31-529, 34-1, 34-75, 34-79, 34-86, 34-92, 34-21, 34-139, 33-310 and 33-224.

## Fall Planting of Test Fields

During the early fall season, September 17 to October 14, 1941, the regular test field variety plantings were made at each of the test field locations. Main plot plantings consisted of the following varieties: C.P. Nos. 28-19, 29-320, 34-21, 34-79, 34-120, 34-139, 33-243, 33-372 and 33-409. In the western section and the Teche area, Co. 290 and C.P. 29-116 were used as the standard varieties in the main plot tests.

Introductory small plot plantings, with seed cane furnished by the Sugar Experiment Station, were made of the following varieties at all test fields: C.P. Nos. 32-206, 33-485, 34-141, 34-143, 35-14, 36-17, 36-19, 36-55, 36-62, 36-70, 36-75, 36-85, 36-94, 36-105 and F 31-962. Also about 250 stalks of C.P. 36-191, through courtesy of Clovelly Test Field of the Houma Station.

FREY BROS., INC.
FAMOUS BRAND
MEAT FOOD PRODUCTS
DONALDSONVILLE, LA.

## Test Fields, Season of 1941

In the season of 1941, sugar cane variety work was conducted at the eight Experiment Station test fields located in the representative sections of the Louisiana sugar cane belt. There was a total of twenty-two experimental variety fields averaging about two acres in size; consisting of nine fall plant cane, nine first stubble and four second stubble test fields. On these fields, there was a total of twenty-six varieties, consisting of eight commercial canes, and eighteen unreleased varieties.

The Experiment Station test fields were worked by the cooperators under their regular field system practiced in the commercial production of sugar cane for sugar. During the harvesting season, October 24 to December 5, 1941, the final results involving the weighing of plots, big-mill tests and analyses of the main plot varieties, was completed under Experiment Station supervision with the cooperators providing the facilities for weighing, milling and testing the varieties. In addition to this work, a total of 278 small mill analyses of five stalk samples were made during the months of September to December, in the laboratories of test field cooperators. The complete data and results of the Experiment Station test fields have been tabulated, and are presented in Tables Nos. 1 to 9 inclusive.

## Tabulated Data and Results

The tabulated data gives the calculated normal juice for each variety, the calculated field yield expressed in tons per acre, the value per ton and per acre, and the "balance column", which is derived by deducting a uniform (tons per acre X $1.00 harvesting expense) from the per acre value, and represents the per acre money value of the variety.

In the evaluation of the varieties in tables Nos. 1 to 8 inclusive, all of the calculations are based on the regular "Louisiana Sugar Cane Contract" with basis of 11½ to 12½ per cent sucrose in normal juice. A uniform cost figure of $1.00 per ton was used as a basis for total harvesting expenses. An average price of $3.49 per ton for standard cane was used in all calculations. This figure was derived from the average ($3.49) of twelve weekly 96 test raw sugar quotations, for the period of October 23, 1941 to January 8, 1942, of the Sugar and Rice Exchange and the Cane Products Trade Association Inc., of New Orleans, Louisiana.

In 1941, a molasses bonus was paid for all mill cane used in the manufacture of raw sugar. The payments that were made were on the per ton basis of the following "Louisiana Sugar Cane Contract," formula:

$$\frac{\text{6.5 Gals. X (Weekly Blackstrap price) minus .08c}}{2}$$

The average price of blackstrap molasses during the twelve week period was .14525c. According to the formula this gives an average of .212c per ton of cane.

The molasses bonus (.212c) was not used in the calculations, in order to maintain the same basis of comparisons as in the test field results of previous seasons.

**Table No. 1—Cinclare Test Fields**

| Variety | Normal Juice | | | Tons Per Acre | Value | | Less $1 Harvest | Balance |
|---|---|---|---|---|---|---|---|---|
| | Brix | Sucrose | Purity | | Ton | Acre | | |
| **Fall Plant Cane—Yazoo series** | | | | | | | | |
| C. P. 29-120 | 16.08 | 13.65 | 84.89 | 28.53 | $3.89 | $110.98 | $28.53 | $82.45 |
| C. P. 28-19 | 15.49 | 12.71 | 82.05 | 29.10 | 3.56 | 103.60 | 29.10 | 74.50 |
| C. P. 33-243 | 14.33 | 11.55 | 80.60 | 28.81 | 3.49 | 100.55 | 28.81 | 71.74 |
| C. P. 29-320 | 15.49 | 12.92 | 83.41 | 25.07 | 3.64 | 91.25 | 25.07 | 66.18 |
| C. P. 29-103 | 16.55 | 12.99 | 76.49 | 23.91 | 3.66 | 87.51 | 23.91 | 63.60 |
| C. P. 33-310 | 15.88 | 11.70 | 73.68 | 20.14 | 3.49 | 70.29 | 20.14 | 50.15 |
| **Fall Plant Cane—Sharkey series** | | | | | | | | |
| C. P. 29-116 | 15.76 | 12.52 | 79.44 | 16.90 | 3.50 | 59.15 | 16.90 | 42.25 |
| C. P. 29-103 | 17.82 | 14.64 | 82.15 | 10.00 | 4.24 | 42.40 | 10.00 | 32.40 |
| C. P. 29-120 | 16.08 | 13.36 | 83.08 | 11.16 | 3.79 | 42.30 | 11.16 | 31.14 |
| C. P. 28-11 | 15.98 | 12.44 | 77.85 | 12.21 | 3.49 | 42.61 | 12.21 | 30.40 |
| C. P. 33-372 | 15.21 | 11.38 | 74.82 | 10.93 | 3.41 | 37.27 | 10.93 | 26.34 |
| C. P. 31-529 | 15.66 | 12.95 | 82.69 | 9.67 | 3.65 | 35.30 | 9.67 | 25.63 |
| C. P. 33-243 | 14.82 | 12.16 | 82.05 | 9.09 | 3.49 | 31.72 | 9.09 | 22.63 |
| **First Stubble—Yazoo series** | | | | | | | | |
| C. P. 29-120 | 16.97 | 13.73 | 80.91 | 21.76 | 3.92 | 85.30 | 21.76 | 63.54 |
| C. P. 31-529 | 15.57 | 11.73 | 75.34 | 25.44 | 3.49 | 88.79 | 25.44 | 63.35 |
| C. P. 29-103 | 17.55 | 13.42 | 76.47 | 21.93 | 3.81 | 83.55 | 21.93 | 61.62 |
| C. P. 28-19 | 16.29 | 13.11 | 80.48 | 20.08 | 3.70 | 74.30 | 20.08 | 54.22 |
| Co. 270 | 15.32 | 11.61 | 75.78 | 21.75 | 3.49 | 75.91 | 21.75 | 54.16 |
| C. P. 33-243 | 15.80 | 12.55 | 79.43 | 20.00 | 3.51 | 70.20 | 20.00 | 50.20 |
| C. P. 29-320 | 16.48 | 13.55 | 82.22 | 16.75 | 3.86 | 64.66 | 16.75 | 47.91 |
| **First Stubble—Sharkey series** | | | | | | | | |
| C. P. 33-224 | 16.19 | 12.87 | 79.49 | 10.33 | 3.62 | 37.39 | 10.33 | 27.06 |
| C. P. 29-103 | 18.42 | 15.13 | 82.14 | 6.93 | 4.41 | 30.56 | 6.93 | 23.63 |
| C. P. 31-529 | 15.96 | 12.67 | 79.39 | 9.23 | 3.55 | 32.77 | 9.23 | 23.54 |
| C. P. 29-116 | 17.26 | 13.38 | 77.52 | 7.79 | 3.80 | 29.60 | 7.79 | 21.81 |
| C. P. 29-120 | 17.41 | 14.05 | 80.70 | 6.17 | 4.03 | 24.87 | 6.17 | 18.70 |
| C. P. 28-11 | 15.67 | 11.85 | 75.62 | 3.41 | 3.49 | 11.90 | 3.41 | 8.49 |
| **Second Stubble—Yazoo series** | | | | | | | | |
| C. P. 29-120 | 17.74 | 14.45 | 81.45 | 19.06 | 4.17 | 79.48 | 19.06 | 60.42 |
| C. P. 29-103 | 17.94 | 13.70 | 76.37 | 20.00 | 3.91 | 78.20 | 20.00 | 58.20 |
| C. P. 31-529 | 16.39 | 12.40 | 75.66 | 19.88 | 3.49 | 69.38 | 19.88 | 49.50 |
| C. P. 29-137 | 16.87 | 13.08 | 77.53 | 17.96 | 3.69 | 66.27 | 17.96 | 48.31 |
| C. P. 29-320 | 16.87 | 13.78 | 81.68 | 16.35 | 3.94 | 64.42 | 16.35 | 48.07 |
| C. P. 33-243 | 16.39 | 13.34 | 81.39 | 16.08 | 3.78 | 60.78 | 16.08 | 44.70 |
| C. P. 28-19 | 17.16 | 13.87 | 80.83 | 12.29 | 3.97 | 48.79 | 12.29 | 36.50 |

**Notes**

Fall Plant Cane: (Yazoo and Sharkey series) planted September 18, 1940, and harvested and milled November 18-19, 1941. Buds of the "sandy land" (Yazoo series varieties were in a sound condition; while the buds of the "black land" (Sharkey series) varieties and most of the eyes were killed by freeze (32 degrees C) on November 13, 1941. Black land varieties were topped down three joints, while sandy land varieties were topped down two joints.

First Stubble: Yazoo series planted September 18, 1939 and Sharkey series planted September 19, 1939. Harvesting dates of both fields, November 21, 1940 and October 28, 1941.

Second Stubble: Planted September 20, 1938. Harvesting dates, November 20, 1939, November 4, 1940 and October 28, 1941.

**Table No. 2—Glenwood Test Fields**

| Variety | Normal Juice | | | Tons Per Acre | Value | | Less $1 Harvest | Balance |
|---|---|---|---|---|---|---|---|---|
| | Brix | Sucrose | Purity | | Ton | Acre | | |
| **Fall Plant Cane—Yazoo Series** | | | | | | | | |
| C. P. 34-21 | 15.17 | 11.99 | 79.04 | 31.50 | $3.49 | $109.94 | $31.50 | $78.44 |
| C. P. 29-120 | 16.19 | 13.27 | 81.96 | 24.22 | 3.76 | 91.07 | 24.22 | 66.85 |
| C. P. 34-79 | 16.48 | 13.42 | 81.43 | 23.69 | 3.81 | 90.26 | 23.69 | 66.57 |
| C. P. 28-19 | 17.71 | 14.05 | 79.33 | 21.83 | 4.03 | 87.97 | 21.83 | 66.14 |
| C. P. 29-103 | 16.31 | 12.33 | 75.60 | 26.15 | 3.49 | 91.26 | 26.15 | 65.11 |
| C. P. 33-243 | 15.24 | 12.17 | 79.86 | 25.27 | 3.49 | 88.19 | 25.27 | 62.92 |
| C. P. 33-372 | 16.70 | 12.96 | 77.60 | 23.00 | 3.65 | 83.95 | 23.00 | 60.95 |
| C. P. 29-320 | 16.12 | 12.70 | 78.78 | 22.94 | 3.56 | 81.67 | 22.94 | 58.73 |
| C. P. 34-1 | 15.24 | 11.10 | 72.83 | 26.55 | 3.21 | 85.23 | 26.55 | 58.68 |
| C. P. 33-310 | 15.49 | 11.36 | 73.34 | 22.85 | 3.39 | 77.46 | 22.85 | 54.61 |
| C. P. 33-425 | 17.02 | 14.22 | 83.55 | 17.50 | 4.09 | 71.58 | 17.50 | 54.08 |
| C. P. 34-77 | 13.93 | 10.01 | 71.86 | 17.00 | 2.45 | 41.65 | 17.00 | 24.65 |
| **First Stubble—Yazoo Series** | | | | | | | | |
| C. P. 33-372 | 15.24 | 11.55 | 75.79 | 19.44 | 3.49 | 67.85 | 19.44 | 48.41 |
| C. P. 31-529 | 15.80 | 11.50 | 72.78 | 16.48 | 3.49 | 57.52 | 16.48 | 41.04 |
| C. P. 29-120 | 14.91 | 12.04 | 80.75 | 15.67 | 3.49 | 54.69 | 15.67 | 39.02 |
| C. P. 29-103 | 16.34 | 12.73 | 77.91 | 14.61 | 3.57 | 52.16 | 14.61 | 37.55 |
| Co. 270 | 14.43 | 10.64 | 73.74 | 19.57 | 2.89 | 56.56 | 19.57 | 36.99 |
| C. P. 34-79* | 14.61 | 12.00 | 82.14 | 12.60 | 3.49 | 43.97 | 12.60 | 31.37 |
| C. P. 28-11** | 16.28 | 11.20 | 68.80 | 13.24 | 3.28 | 43.43 | 13.24 | 30.19 |
| C. P. 28-19 | 15.70 | 12.70 | 80.89 | 9.75 | 3.56 | 34.71 | 9.75 | 24.96 |
| C. P. 29-320 | 15.24 | 11.70 | 76.77 | 7.55 | 3.49 | 26.35 | 7.55 | 18.80 |
| C. P. 33-243 | 14.38 | 10.08 | 70.10 | 11.81 | 2.50 | 29.53 | 11.81 | 17.72 |

**Notes**

Fall Plant Cane: Planted October 2, 1940. Harvested November 19-20, 1941.

First Stubble: Planted September 21, 1939. Harvested November 24, 1940 and October 30, 1941.

C. P. 34-79*: Plot harvested for seed cane, October 2, 1940. The plot that was harvested at the regular time, November 24, 1940, was a complete failure.

C. P. 28-11**: "Black land" plot.

**Table No. 3—Reserve Test Fields**

| Variety | Normal Juice | | | Tons Per Acre | Value | | Less $1 Harvest | Balance |
|---|---|---|---|---|---|---|---|---|
| | Brix | Sucrose | Purity | | Ton | Acre | | |
| **Fall Plant Cane—Yazoo Series** | | | | | | | | |
| C. P. 34-79 | 15.81 | 12.30 | 77.80 | 31.05 | $3.49 | $108.36 | $31.05 | $77.31 |
| C. P. 33-372 | 16.03 | 11.54 | 71.99 | 24.22 | 3.49 | 84.53 | 24.22 | 60.31 |
| C. P. 28-19 | 15.46 | 11.07 | 71.60 | 25.63 | 3.19 | 81.76 | 25.63 | 56.13 |
| C. P. 29-103 | 15.10 | 10.24 | 67.81 | 29.62 | 2.61 | 77.31 | 29.62 | 47.69 |
| C. P. 33-243 | 14.24 | 10.24 | 71.91 | 27.45 | 2.61 | 71.64 | 27.45 | 44.19 |
| C. P. 34-21 | 14.23 | 9.97 | 70.06 | 30.25 | 2.42 | 73.21 | 30.25 | 42.96 |
| C. P. 29-320 | 14.43 | 10.05 | 69.65 | 28.39 | 2.48 | 70.41 | 28.39 | 42.02 |
| C. P. 34-1 | 14.27 | 9.37 | 65.66 | 30.55 | 2.36 | 72.10 | 30.55 | 41.55 |
| C. P. 29-120 | 13.26 | 8.91 | 67.19 | 23.88 | 2.13 | 50.86 | 23.88 | 26.98 |
| **First Stubble—Yazoo Series** | | | | | | | | |
| C. P. 28-11 | 16.61 | 12.18 | 73.33 | 26.06 | 3.49 | 90.95 | 26.06 | 64.89 |
| C. P. 31-529 | 17.07 | 12.23 | 71.65 | 25.37 | 3.49 | 88.54 | 25.37 | 63.17 |
| Co. 270 | 15.20 | 11.19 | 73.61 | 24.70 | 3.27 | 80.77 | 24.70 | 56.07 |
| C. P. 28-19 | 16.78 | 12.84 | 76.52 | 21.06 | 3.61 | 76.03 | 21.06 | 54.97 |
| C. P. 29-120 | 16.19 | 12.39 | 76.53 | 21.42 | 3.49 | 74.76 | 21.42 | 53.34 |
| C. P. 29-320 | 16.06 | 12.28 | 76.46 | 20.85 | 3.49 | 72.77 | 20.85 | 51.92 |
| C. P. 29-103 | 15.41 | 11.54 | 74.89 | 19.88 | 3.49 | 69.38 | 19.88 | 49.50 |
| C. P. 33-243 | 14.93 | 11.06 | 74.08 | 21.38 | 3.18 | 67.99 | 21.38 | 46.61 |
| C. P. 34-79 | 15.86 | 12.00 | 75.66 | 16.85 | 3.49 | 58.81 | 16.85 | 41.96 |
| **Second Stubble—Yazoo Series** | | | | | | | | |
| C. P. 29-120 | 15.54 | 11.03 | 70.98 | 18.73 | 3.16 | 59.19 | 18.73 | 40.46 |
| C. P. 28-19 | 15.51 | 10.78 | 69.50 | 18.55 | 2.99 | 55.46 | 18.55 | 36.91 |
| C. P. 31-529 | 14.35 | 8.70 | 60.63 | 27.50 | 1.96 | 53.90 | 27.50 | 26.40 |
| C. P. 29-103 | 14.78 | 9.08 | 61.43 | 20.10 | 2.16 | 43.42 | 20.10 | 23.32 |
| C. P. 33-243 | 13.66 | 9.14 | 66.91 | 18.50 | 2.22 | 41.07 | 18.50 | 22.57 |
| C. P. 29-320 | 13.76 | 9.23 | 67.08 | 17.33 | 2.28 | 39.51 | 17.33 | 22.18 |
| C. P. 29-137 | 13.46 | 8.56 | 63.60 | 17.50 | 1.93 | 33.78 | 17.50 | 16.28 |
| C. P. 28-11 | 13.82 | 8.43 | 60.00 | 13.40 | 1.79 | 23.99 | 13.40 | 10.59 |

**Notes**

Fall Plant Cane: Planted September 19, 1940 and harvested and milled November 26-27, 1941. Cane cut top and bottom, and trash burned off. Percentage cane borer joint infestation counts were made on 50 stalks of each of the following varieties with A. L. Dugas (L. S. U. Entomology): C. P. 29-103, 70.12% bored joints; C. P. 29-120, 39.67% bored joints; C. P. 33-243, 33.56% bored joints and C. P. 28-19, 45.33% bored joints.

First Stubble: Harvesting dates November 26, 1940 and November 4, 1941. Planted September 20, 1939. Cane borer damage not as heavy as in the second stubble test field. Cane cut top and bottom and trash only partially burned.

Second Stubble: Harvesting dates November 27, 1939, November 6, 1940 and November 4, 1941. Planted September 21, 1938. All varieties were badly damaged by cane borers. Cane cut top and bottom and trash partially burned.

**Table No. 4—Meeker Test Fields**

| Variety | Normal Juice | | | Tons Per Acre | Value | | Less $1 Harvest | Balance |
|---|---|---|---|---|---|---|---|---|
| | Brix | Sucrose | Purity | | Ton | Acre | | |
| **Fall Plant Cane—Yahola very fine sandy loam** | | | | | | | | |
| C. P. 34-79 | 15.50 | 11.45 | 73.87 | 31.70 | $3.46 | $109.68 | $31.70 | $77.98 |
| C. P. 28-19 | 15.60 | 11.39 | 73.01 | 27.59 | 3.41 | 94.08 | 27.59 | 66.49 |
| C. P. 33-425 | 15.70 | 11.86 | 75.54 | 25.02 | 3.49 | 87.32 | 25.02 | 62.30 |
| C. P. 29-320 | 16.09 | 11.91 | 74.02 | 24.90 | 3.49 | 86.90 | 24.90 | 62.00 |
| C. P. 33-243 | 14.72 | 10.62 | 72.15 | 32.59 | 2.88 | 93.86 | 32.59 | 61.27 |
| C. P. 33-409 | 13.84 | 9.32 | 67.34 | 33.33 | 2.32 | 77.33 | 33.33 | 44.00 |
| C. P. 34-21 | 13.26 | 8.65 | 65.23 | 38.13 | 2.01 | 76.64 | 38.13 | 38.51 |
| C. P. 34-1 | 13.26 | 8.36 | 63.05 | 34.17 | 1.85 | 63.21 | 34.17 | 29.04 |
| C. P. 33-310 | 14.04 | 8.41 | 59.90 | 31.72 | 1.82 | 57.73 | 31.72 | 26.01 |
| **First Stubble—Yahola very fine sandy loam** | | | | | | | | |
| C. P. 33-425 | 16.67 | 13.05 | 78.28 | 28.88 | 3.68 | 106.28 | 28.88 | 77.40 |
| C. P. 29-320 | 16.96 | 12.40 | 73.11 | 25.00 | 3.49 | 87.25 | 25.00 | 62.25 |
| C. P. 28-19 | 16.18 | 12.13 | 74.97 | 24.59 | 3.49 | 85.82 | 24.59 | 61.23 |
| Co. 270 | 13.94 | 9.29 | 66.64 | 37.62 | 2.31 | 86.90 | 37.62 | 49.28 |
| C. P. 34-79 | 15.11 | 10.61 | 70.22 | 26.18 | 2.87 | 75.14 | 26.18 | 48.96 |
| C. P. 31-529 | 15.21 | 10.27 | 67.52 | 29.00 | 2.63 | 76.27 | 29.00 | 47.27 |
| C. P. 33-372 | 15.11 | 10.56 | 69.89 | 25.75 | 2.83 | 72.87 | 25.75 | 47.12 |
| C. P. 33-243 | 13.94 | 9.89 | 70.95 | 30.90 | 2.37 | 73.23 | 30.90 | 42.33 |
| C. P. 29-120 | 14.14 | 9.67 | 68.39 | 33.54 | 2.21 | 74.12 | 33.54 | 40.58 |
| C. P. 29-103 | 15.02 | 8.72 | 58.06 | 28.05 | 1.93 | 54.14 | 28.05 | 26.09 |
| C. P. 34-120 | 15.74 | 12.61 | 80.11 | ------ | 3.53 | ------ | ------ | ------ |
| **Second Stubble—Yahola very fine sandy loam** | | | | | | | | |
| C. P. 29-120 | 15.21 | 11.09 | 72.91 | 25.42 | 3.20 | 81.34 | 25.42 | 55.99 |
| C. P. 29-320 | 15.79 | 11.74 | 74.35 | 15.82 | 3.49 | 55.21 | 15.82 | 39.39 |
| C. P. 33-310 | 14.92 | 9.24 | 61.93 | 31.05 | 2.23 | 69.24 | 31.05 | 38.10 |
| C. P. 33-243 | 13.84 | 9.63 | 69.58 | 28.90 | 2.18 | 63.00 | 28.90 | 34.16 |
| C. P. 28-19 | 15.50 | 10.95 | 70.65 | 14.72 | 3.11 | 45.78 | 14.72 | 31.03 |
| C. P. 32-134 | 13.55 | 8.76 | 64.65 | 22.07 | 2.03 | 44.80 | 22.07 | 22.73 |
| Co. 281 | 13.26 | 8.72 | 65.76 | 19.02 | 2.02 | 38.42 | 19.02 | 19.40 |
| C. P. 31-529 | 13.36 | 8.01 | 59.96 | 23.62 | 1.62 | 38.26 | 23.62 | 14.62 |
| C. P. 29-103 | 15.11 | 9.53 | 63.07 | 9.12 | 2.11 | 19.24 | 9.12 | 10.12 |

**Notes**

Fall Plant Cane: Planted October 10, 1940. Harvested and milled November 14-15, 1941. Small mill test of C. P. 34-120, calculated to normal juice was as follows: Brix, 15.37; sucrose, 12.14; purity, 78.99.

First Stubble: Planted October 4, 1939. Harvested November 19, 1940 and October 24, 1941.

Second Stubble: Planted October 4, 1938. Harvested November 5, 1939, November 19, 1940 and October 24, 1941.

**Table No. 5—Shirley Test Fields**

| Variety | Normal Juice | | | Tons Per Acre | Value | | Less $1 Harvest | Balance |
|---|---|---|---|---|---|---|---|---|
| | Brix | Sucrose | Purity | | Ton | Acre | | |
| **Fall Plant Cane—Yahola very fine sandy loam** | | | | | | | | |
| C. P. 34-79 | 15.24 | 11.54 | 75.72 | 38.56 | $3.49 | $134.57 | $38.56 | $96.01 |
| C. P. 29-103 | 16.85 | 12.13 | 71.99 | 37.73 | 3.49 | 131.68 | 37.73 | 93.95 |
| C. P. 28-19 | 15.78 | 11.70 | 75.41 | 37.49 | 3.49 | 130.84 | 37.49 | 93.35 |
| C. P. 29-320 | 15.73 | 11.99 | 76.22 | 36.76 | 3.49 | 128.29 | 36.76 | 91.53 |
| C. P. 33-243 | 14.81 | 11.16 | 75.35 | 39.89 | 3.25 | 129.64 | 39.89 | 89.75 |
| C. P. 33-425 | 16.27 | 12.83 | 78.86 | 33.45 | 3.61 | 120.75 | 33.45 | 87.30 |
| C. P. 34-120* | 15.34 | 11.41 | 74.38 | 35.06 | 3.43 | 120.26 | 35.06 | 85.20 |
| C. P. 33-310 | 15.10 | 10.33 | 68.41 | 37.28 | 2.67 | 99.54 | 37.28 | 62.26 |
| C. P. 33-372 | 15.24 | 10.63 | 69.75 | 30.00 | 2.88 | 86.40 | 30.00 | 56.40 |
| C. P. 29-120 | 14.56 | 10.21 | 70.12 | 34.55 | 2.59 | 89.48 | 34.55 | 54.93 |
| C. P. 34-1 | 14.36 | 10.06 | 70.06 | 35.09 | 2.48 | 87.02 | 35.09 | 51.93 |
| C. P. 34-80 | 14.07 | 9.75 | 69.30 | 34.55 | 2.27 | 78.43 | 34.55 | 43.88 |
| C. P. 34-77 | 14.26 | 9.75 | 68.37 | 29.09 | 2.27 | 66.03 | 29.09 | 36.94 |
| **First Stubble—Yahola very fine sandy loam** | | | | | | | | |
| C. P. 29-103 | 18.07 | 13.99 | 77.42 | 21.09 | 4.01 | 84.57 | 21.09 | 63.48 |
| C. P. 34-79 | 16.02 | 12.79 | 79.84 | 21.24 | 3.59 | 76.25 | 21.24 | 55.01 |
| C. P. 29-320 | 16.02 | 12.84 | 80.15 | 18.79 | 3.61 | 67.83 | 18.79 | 49.04 |
| C. P. 33-243 | 16.02 | 13.11 | 81.84 | 18.15 | 3.70 | 67.16 | 18.15 | 49.01 |
| Co. 270 | 15.73 | 12.35 | 78.51 | 18.97 | 3.49 | 66.21 | 18.97 | 47.24 |
| C. P. 31-529 | 16.32 | 12.23 | 74.94 | 17.60 | 3.49 | 61.42 | 17.60 | 43.82 |
| C. P. 29-120 | 16.12 | 12.62 | 78.29 | 16.39 | 3.53 | 57.86 | 16.39 | 41.47 |
| C. P. 28-19 | 18.07 | 15.08 | 83.75 | 10.30 | 4.39 | 45.22 | 10.30 | 34.92 |

**Notes**

Fall Plant Cane: Planted September 27, 1940. Harvested November 14 and December 3, 1941.

Averages of analyses and field results of the two harvesting and milling dates are given of the following varieties: C. P. Nos. 34-79, 29-103, 28-19, 29-320, 33-243, 33-310 and 29-120. The results of the other varieties are from the harvesting and milling date of November 14, 1941. The field yield of C. P. 34-120 (35.06 tons per acre) was figured from seed cane that was weighed on October 17, 1941.

First Stubble: Planted September 25, 1939. Harvesting dates: November 14, 1940 and November 5, 1941.

**Table No. 6—Sterling Test Fields**

| Variety | Normal Juice | | | Tons Per Acre | Value | | Less $1 Harvest | Balance |
|---|---|---|---|---|---|---|---|---|
| | Brix | Sucrose | Purity | | Ton | Acre | | |
| **Fall Plant Cane—Franklin Series** | | | | | | | | |
| C. P. 34-79 | 17.99 | 15.15 | 84.21 | 20.42 | $4.41 | $90.05 | $20.42 | $69.63 |
| C. P. 33-243 | 17.12 | 14.33 | 83.70 | 21.00 | 4.13 | 86.73 | 21.00 | 65.73 |
| C. P. 29-103 | 17.85 | 14.20 | 79.55 | 20.86 | 4.08 | 85.32 | 20.86 | 64.46 |
| C. P. 29-116 | 15.76 | 11.92 | 75.63 | 25.47 | 3.49 | 88.89 | 25.47 | 63.42 |
| C. P. 29-120 | 16.54 | 13.17 | 79.63 | 22.12 | 3.72 | 82.29 | 22.12 | 60.17 |
| Co. 290 | 15.66 | 12.06 | 77.01 | 22.74 | 3.49 | 79.36 | 22.74 | 56.62 |
| C. P. 34-77 | 17.45 | 13.38 | 76.68 | 20.15 | 3.80 | 76.57 | 20.15 | 56.42 |
| C. P. 33-310 | 15.86 | 11.80 | 74.40 | 19.50 | 3.49 | 68.06 | 19.50 | 48.56 |
| C. P. 33-372 | 17.64 | 14.13 | 80.10 | 15.75 | 4.06 | 63.95 | 15.75 | 48.20 |
| C. P. 33-425 | 16.39 | 13.20 | 80.54 | 17.00 | 3.73 | 63.41 | 17.00 | 46.41 |
| C. P. 34-21 | 15.96 | 12.67 | 79.39 | 18.10 | 3.55 | 64.26 | 18.10 | 46.16 |
| C. P. 29-320 | 16.34 | 13.22 | 80.91 | 14.24 | 3.74 | 53.26 | 14.24 | 39.02 |
| **First Stubble—Franklin Series** | | | | | | | | |
| C. P. 29-116 | 15.74 | 11.92 | 75.73 | 25.93 | 3.49 | 90.50 | 25.93 | 64.57 |
| C. P. 31-529 | 16.98 | 13.36 | 78.68 | 21.38 | 3.79 | 81.03 | 21.38 | 59.65 |
| C. P. 33-372 | 16.31 | 12.52 | 76.76 | 23.28 | 3.50 | 81.48 | 23.28 | 58.20 |
| Co. 290 | 14.67 | 11.05 | 75.32 | 26.62 | 3.18 | 84.65 | 26.62 | 58.03 |
| C. P. 29-120 | 15.62 | 12.34 | 79.00 | 22.92 | 3.49 | 79.99 | 22.92 | 57.07 |
| C. P. 29-103 | 17.94 | 12.43 | 69.29 | 22.22 | 3.49 | 77.55 | 22.22 | 55.33 |
| C. P. 33-243 | 16.00 | 12.89 | 80.56 | 19.21 | 3.63 | 69.73 | 19.21 | 50.52 |
| C. P. 34-79 | 15.64 | 12.05 | 77.05 | 19.68 | 3.49 | 68.68 | 19.68 | 49.00 |
| Co. 270 | 15.09 | 11.80 | 78.20 | 18.60 | 3.49 | 64.91 | 18.60 | 46.31 |
| C. P. 28-19 | 16.50 | 13.43 | 81.39 | 15.97 | 3.81 | 60.85 | 15.97 | 44.88 |
| C. P. 29-320 | 14.30 | 11.33 | 79.23 | 9.03 | 3.37 | 30.43 | 9.03 | 21.40 |
| **Second Stubble—Franklin Series** | | | | | | | | |
| C. P. 31-529 | 17.60 | 13.60 | 77.27 | 21.30 | 3.87 | 82.43 | 21.30 | 61.13 |
| Co. 290 | 16.03 | 12.86 | 80.22 | 22.94 | 3.62 | 83.04 | 22.94 | 60.10 |
| C. P. 33-224 | 16.51 | 12.95 | 78.44 | 21.80 | 3.65 | 79.57 | 21.80 | 57.77 |
| C. P. 29-120 | 16.34 | 12.85 | 78.64 | 21.30 | 3.61 | 76.89 | 21.30 | 55.59 |
| C. P. 29-103 | 18.06 | 14.12 | 78.18 | 17.82 | 4.06 | 72.35 | 17.82 | 54.53 |
| C. P. 29-116 | 15.44 | 11.62 | 75.26 | 20.60 | 3.49 | 71.89 | 20.60 | 51.29 |
| C. P. 29-283 | 17.04 | 12.88 | 75.59 | 18.29 | 3.62 | 66.21 | 18.29 | 47.92 |
| C. P. 29-137 | 16.31 | 12.75 | 78.17 | 15.50 | 3.58 | 55.49 | 15.50 | 39.99 |
| C. P. 33-243 | 16.21 | 13.10 | 80.81 | 13.89 | 3.70 | 51.39 | 13.89 | 37.50 |
| C. P. 29-320 | 16.01 | 12.87 | 80.39 | 11.80 | 3.62 | 42.72 | 11.80 | 30.92 |
| C. P. 28-19 | 18.33 | 15.09 | 82.32 | 8.33 | 4.39 | 36.57 | 8.33 | 28.24 |

**Notes**

Fall Plant Cane: Planted October 3, 1940. Harvested December 5, 1941. Most of the varieties showed considerable cane borer damage. Co. 290, C. P. 29-103, C. P. 29-320, C. P. 33-310 and C. P. 33-425 were very badly bored. C. P. 29-116 and C. P. 29-120 showed medium borer damage; while C. P. Nos. 34-21, 34-77, 34-79 and 33-372 were damaged to a less extent by cane borers. The following varieties were tasseling: C. P. 29-120, C. P. 29-116 and C. P. 29-103.

First Stubble: Planted September 25, 1939. Harvesting dates, November 14, 1940 and November 10, 1941. All varieties were badly damaged by cane borers.

Second Stubble: Planted October 6, 1938. Harvested December 12, 1939, November 13, 1940 and November 10, 1941. All yarieties badly damaged by cane borers.

**Table No. 7—Billeaud Test Fields**

| Variety | Normal Juice | | | Tons Per Acre | Value | | Less $1 Harvest | Balance |
|---|---|---|---|---|---|---|---|---|
| | Brix | Sucrose | Purity | | Ton | Acre | | |
| **Fall Plant Cane—Lintonia Silt Loam** | | | | | | | | |
| C. P. 34-79 | 18.43 | 15.88 | 86.16 | 21.88 | $4.67 | $102.18 | $21.88 | $80.30 |
| C. P. 33-310 | 18.53 | 15.06 | 81.27 | 23.60 | 4.38 | 103.37 | 23.60 | 79.77 |
| C. P. 29-116 | 15.60 | 11.48 | 73.59 | 30.83 | 3.48 | 107.29 | 30.83 | 76.46 |
| Co. 290 | 15.41 | 11.62 | 75.41 | 30.20 | 3.49 | 105.40 | 30.20 | 75.20 |
| C. P. 33-243 | 15.89 | 13.13 | 82.63 | 25.85 | 3.71 | 95.90 | 25.85 | 70.05 |
| C. P. 29-120 | 16.67 | 13.72 | 82.30 | 22.31 | 3.92 | 87.46 | 22.31 | 65.15 |
| C. P. 29-320 | 16.87 | 13.81 | 81.86 | 21.13 | 3.95 | 83.46 | 21.13 | 62.33 |
| C. P. 33-224 | 16.48 | 12.71 | 77.12 | 23.53 | 3.56 | 83.77 | 23.53 | 60.24 |
| C. P. 33-425 | 18.04 | 15.60 | 86.47 | 16.80 | 4.57 | 76.78 | 16.80 | 59.98 |
| C. P. 34-1 | 15.60 | 11.87 | 76.09 | 24.06 | 3.49 | 83.97 | 24.06 | 59.91 |
| C. P. 34-21 | 15.89 | 12.78 | 80.43 | 22.80 | 3.59 | 81.85 | 22.80 | 59.05 |
| C. P. 34-77 | 16.77 | 13.35 | 79.61 | 20.40 | 3.79 | 77.32 | 20.40 | 56.92 |
| C. P. 33-372 | 17.75 | 14.78 | 83.27 | 16.13 | 4.29 | 69.20 | 16.13 | 53.07 |
| C. P. 34-120 | 16.67 | 13.01 | 78.04 | ------ | ------ | ------ | ------ | ------ |
| **First Stubble—Lintonia Silt Loam** | | | | | | | | |
| C. P. 31-529 | 18.14 | 14.06 | 77.51 | 22.29 | 4.03 | 89.83 | 22.29 | 67.54 |
| Co. 290 | 15.41 | 12.08 | 78.39 | 24.96 | 3.49 | 87.11 | 24.96 | 62.15 |
| C. P. 29-116 | 15.80 | 12.19 | 77.15 | 24.82 | 3.49 | 86.62 | 24.82 | 61.80 |
| C. P. 34-1 | 15.41 | 11.89 | 77.16 | 24.14 | 3.49 | 84.25 | 24.14 | 60.11 |
| C. P. 33-310 | 18.33 | 14.48 | 79.00 | 17.78 | 4.18 | 74.32 | 17.78 | 56.54 |
| C. P. 33-224 | 17.16 | 14.21 | 82.81 | 17.78 | 4.09 | 72.72 | 17.78 | 54.94 |
| C. P. 33-243 | 15.80 | 13.17 | 83.35 | 20.13 | 3.72 | 74.88 | 20.13 | 54.75 |
| C. P. 31-509 | 15.80 | 12.78 | 80.89 | 20.55 | 3.59 | 73.77 | 20.55 | 53.22 |
| C. P. 29-320 | 17.16 | 14.68 | 85.55 | 16.03 | 4.25 | 68.13 | 16.03 | 52.10 |
| Co. 270 | 16.38 | 13.43 | 81.99 | 18.26 | 3.81 | 69.57 | 18.26 | 51.31 |
| C. P. 29-120 | 17.75 | 15.13 | 85.24 | 13.03 | 4.41 | 57.46 | 13.03 | 44.43 |
| C. P. 34-79 | 18.14 | 15.41 | 84.95 | 8.50 | 4.51 | 38.34 | 8.50 | 29.84 |

**Notes**

Fall Plant Cane: Planted September 25, 1940, following two crops of soybeans, without corn. Both legume crops were plowed under. Harvested and milled November 23-24, 1941. Plot of C. P. 34-120 fertilized with Nitrate of Soda at rate of 200 pounds per acre. The other varieties were not feritlized.

First Stubble: Planted September 26, 1939. Harvested November 22, 1940 and November 7, 1941. The stubble was off-barred and shaved with slide-type shaver in late February. All varieties fertilized with 12-8-0 at the rate of 300 pounds per acre, during the early part of April.

**Table No. 8—Youngsville Test Fields**

| Variety | Normal Juice | | | Tons Per Acre | Value | | Less $1 Harvest | Balance |
|---|---|---|---|---|---|---|---|---|
| | Brix | Sucrose | Purity | | Ton | Acre | | |
| **Fall Plant Cane—Lintonia Silt Loam** | | | | | | | | |
| C. P. 33-310 | 16.16 | 11.90 | 73.64 | 31.00 | $3.49 | $108.19 | $31.00 | $77.19 |
| C. P. 34-79 | 16.43 | 13.45 | 81.86 | 26.05 | 3.82 | 99.51 | 26.05 | 73.46 |
| Co. 290 | 14.63 | 11.20 | 76.56 | 30.56 | 3.28 | 100.24 | 30.56 | 69.68 |
| C. P. 29-103 | 16.63 | 11.55 | 69.45 | 27.92 | 3.49 | 97.44 | 27.92 | 69.52 |
| C. P. 28-11 | 15.96 | 11.58 | 72.56 | 26.68 | 3.49 | 93.11 | 26.68 | 66.43 |
| C. P. 29-116 | 14.63 | 10.33 | 70.61 | 38.15 | 2.67 | 101.86 | 38.15 | 63.71 |
| Co. 270 | 14.82 | 11.35 | 76.59 | 26.76 | 3.38 | 90.45 | 26.76 | 63.69 |
| C. P. 33-224 | 14.54 | 10.67 | 73.38 | 32.95 | 2.91 | 95.88 | 32.95 | 62.93 |
| C. P. 29-320 | 16.25 | 12.57 | 77.35 | 23.67 | 3.51 | 83.08 | 23.67 | 59.41 |
| C. P. 33-372 | 16.34 | 11.82 | 72.34 | 21.41 | 3.49 | 74.72 | 21.41 | 53.31 |
| C. P. 29-120 | 15.58 | 12.01 | 77.09 | 21.40 | 3.49 | 74.69 | 21.40 | 53.29 |
| C. P. 33-425 | 15.68 | 12.25 | 78.13 | 20.16 | 3.49 | 70.36 | 20.16 | 50.20 |
| C. P. 34-21 | 13.78 | 9.78 | 70.54 | 34.15 | 2.25 | 76.84 | 34.15 | 42.69 |
| C. P. 33-243 | 14.35 | 9.83 | 68.50 | 30.50 | 2.32 | 70.76 | 30.50 | 40.26 |
| C. P. 34-77 | 14.06 | 9.87 | 70.20 | 23.80 | 2.35 | 55.93 | 23.80 | 32.13 |
| C. P. 34-120 | 16.44 | 13.05 | 79.38 | ------ | 3.68 | ------ | ------ | ------ |
| **First Stubble—Olivier Silt Loam** | | | | | | | | |
| C. P. 29-116 | 17.29 | 14.14 | 81.78 | 9.27 | 4.06 | 37.64 | 9.27 | 28.37 |
| C. P. 33-224 | 17.39 | 14.53 | 83.55 | 6.31 | 4.20 | 26.50 | 6.31 | 20.19 |
| Co. 290 | 17.29 | 14.51 | 83.92 | 5.73 | 4.19 | 24.01 | 5.73 | 18.29 |
| C. P. 33-243 | 16.72 | 13.74 | 82.18 | 5.90 | 3.92 | 23.13 | 5.90 | 17.23 |
| C. P. 29-120 | 17.48 | 14.33 | 81.98 | 5.22 | 4.13 | 21.56 | 5.22 | 16.34 |
| C. P. 28-11 | 18.53 | 14.94 | 80.63 | 4.76 | 4.34 | 20.66 | 4.76 | 15.90 |
| C. P. 31-529 | 17.86 | 14.16 | 79.28 | 4.75 | 4.07 | 19.33 | 4.75 | 14.58 |
| C. P. 29-320 | 17.19 | 14.03 | 81.62 | 4.53 | 4.02 | 18.21 | 4.53 | 13.68 |
| Co. 270 | 15.77 | 12.87 | 81.61 | 4.78 | 3.62 | 17.30 | 4.78 | 12.52 |
| C. P. 34-79 | 17.67 | 15.00 | 84.89 | 0.60 | 4.36 | 2.62 | 0.60 | 2.02 |
| C. P. 34-1 | 16.72 | 13.80 | 82.54 | ------ | 3.94 | ------ | ------ | ------ |
| C. P. 34-120 | 17.77 | 14.93 | 84.02 | ------ | 4.34 | ------ | ------ | ------ |

**Notes**

Fall Plant Cane: Planted September 26, 1940. This field received a heavy application of filter-press mud in December 1939, and produced a good crop of soy-beans without corn, which was turned under in August, 1940. All varieties were fertilized with Cyanamid at the rate of 100 pounds per acre. The varieties were harvested, and analyses were made from 50 stalk random samples, November 15-17, 1941.

First Stubble: Planted September 28, 1939. Harvesting Dates: Novl ember 15, 1940 and November 16, 1941. The extremely low field yields of alvarieties was due mostly to very poor drainage in 1940 and 1941.

**Table A. Rainfall Distribution at the Test Fields—Season of 1941**
Rainfall—expressed in inches

| Location | Jan. | | Feb. | | March | | April | | May | | June | | July | | August | | Sept. | | Oct. | | Nov. | | Dec. | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | days | in. | days | in. | days | in. | days | in. | days | in. | days | in. | days | in. | days | in. | days | in. | days | in. | days | in. | days | in. | days | in. |
| Cinclare | 7 | 4.15 | 7 | 2.30 | 13 | 4.25 | 6 | 3.30 | 6 | 8.05 | 14 | 5.82 | 13 | 9.89 | 5 | 1.57 | 13 | 3.89 | 8 | 5.26 | 9 | 1.27 | 6 | 3.80 | 107 | 53.55 |
| Napoleonville | 9 | 2.92 | 5 | 3.10 | 6 | 5.19 | 5 | 3.39 | 5 | 6.42 | 12 | 3.35 | 16 | 5.98 | 7 | 4.85 | 8 | 4.41 | 7 | 6.72 | 4 | 2.00 | 4 | 3.62 | 88 | 51.95 |
| Reserve | 12 | 5.30 | 12 | 4.09 | 11 | 4.64 | 9 | 2.73 | 8 | 5.60 | 17 | 4.59 | 17 | 7.23 | 9 | 1.82 | 19 | 6.98 | 8 | 4.81 | 9 | 2.54 | 9 | 3.55 | 140 | 53.88 |
| Franklin | 11 | 3.29 | 7 | 2.70 | 13 | 5.44 | 8 | 3.60 | 12 | 7.64 | 13 | 6.81 | 18 | 12.14 | 11 | 2.10 | 14 | 8.41 | 11 | 5.13 | 5 | 2.13 | 7 | 5.15 | 120 | 64.54 |
| Cheneyville | 8 | 3.38 | 4 | 2.03 | 9 | 4.29 | 9 | 8.01 | 11 | 12.09 | 11 | 8.28 | 16 | 8.96 | 5 | 7.66 | 11 | 5.41 | 9 | 3.81 | 6 | 3.98 | 7 | 5.18 | 106 | 73.11 |
| Meeker | 8 | 4.05 | 6 | 1.82 | 6 | 4.64 | 9 | 6.88 | 11 | 9.78 | 11 | 9.30 | 8 | 6.81 | 14 | 5.85 | 8 | 5.37 | 8 | 4.78 | 5 | 1.75 | 3 | 4.09 | 97 | 65.12 |
| Broussard | 8 | 4.11 | 5 | 2.20 | 5 | 4.17 | 4 | 4.57 | 8 | 9.50 | 12 | 5.43 | 14 | 10.86 | 6 | 2.55 | 11 | 6.34 | 7 | 3.58 | 6 | 2.32 | 4 | 3.10 | 90 | 58.73 |
| Youngsville | 7 | 4.24 | 4 | 2.00 | 8 | 5.39 | 3 | 3.10 | 5 | 10.82 | 7 | 5.42 | 13 | 9.28 | 6 | 3.89 | 11 | 6.32 | 8 | 3.56 | 5 | 2.09 | 3 | 3.73 | 80 | 59.84 |

**Note:**—Rainfall data of Cinclare, Reserve, Franklin and Cheneyville taken from U.S.D.A. Weather Bureau records. Data for Napoleonville, Broussard, Meeker and Youngsville were furnished by the respective test field cooperators.

**Table B. Minimum Temperatures at the Test Fields**
**Season of 1941—March, November and December**
Temperatures expressed in degrees Fahrenheit

| Date | Cinclare | Napoleonville | Reserve | Cheneyville | Franklin | Broussard |
|---|---|---|---|---|---|---|
| 3/1 | 31 | 33 | 35 | 31 | 36 | 29 |
| 3/9 | 33 | 35 | 35 | 32 | 36 | 29 |
| 3/18 | 34 | 34 | 33 | 35 | 34 | 30 |
| 11/9 | 33 | 33 | 35 | 33 | 37 | 32 |
| 11/13 | 32 | 34 | 41 | 31 | 39 | 34 |
| 11/16 | 38 | 38 | 41 | 43 | 43 | 38 |
| 11/25 | 31 | 32 | 36 | 29 | 35 | 35 |
| 11/26 | 28 | 31 | 35 | 29 | 34 | 30 |
| 11/27 | 32 | 35 | 37 | 37 | 39 | 30 |
| 12/7 | 28 | 31 | 36 | 29 | 35 | 30 |
| 12/8 | 35 | 38 | 40 | 38 | 43 | 38 |
| 12/15 | 30 | 32 | 34 | 29 | 35 | 34 |
| 12/29 | 32 | 32 | 36 | 32 | 37 | 33 |

Notes: The minimum temperature data of Cinclare, Reserve, Franklin and Cheneyville was taken from the records of the U.S.D.A. Weather Bureau. The Napoleonville data was furnished through courtesy of Elm Hall Plantation of Godchaux Sugars, Inc., and the Broussard data was taken from records of the Billeaud Factory.

## Test Field Summary—Season of 1941

The season of 1941 was particularly unfavorable during the cultivation period, due to excessive rains that entirely prevented or seriously delayed both the early and late season cultivation operations. These unfavorable weather conditions in the critical cultivation stages definitely affected the suckering and growth of the cane and was the main cause for lowering field yields of the cane crop in 1941.

Summer, fall and early winter weather conditions were generally quite favorable, and the very important field activities of fall land preparation, fall planting of cane, and harvesting and milling of the cane crop, were advantageously accomplished during the seasonal periods of 1941. Due to the fact that there were no killing freezes during the months of November and December, the grinding season was completed without the necessity of windrowing mill cane.

There were several of the promising unreleased varieties that made a favorable showing as plant cane or stubble at the test fields during the past season. These varieties were either planted on an increase basis or included in the main plot tests for seed cane purposes and for obtaining additional data and information.

At Reserve, Meeker, Shirley, Sterling and Billeaud test fields, C.P. 34-79 ranked first in the plant cane tests, and ranked second and third at Youngsville and Glenwood. However, it showed its characteristic weakness as first stubble, with the exception of Shirley test field, where it was second ranking variety.

Practically all of the available seed cane of C.P. 34-120 was utilized for increase plantings. Small amounts of this variety were used for juice analyses on a small mill basis. These analyses indicate that C.P. 34-120 compares favorably with C.P. 29-320 from a sucrose standpoint. Its field performance in germination, stand, suckering and growth, as both plant cane and stubble, was generally better than any of the standard varieties.

In the new varieties which were on the test fields as fall plant cane in 1941, there were several like C.P. Nos. 34-75, 34-139 and 31-551 that made a fine growth, but were comparatively low in sucrose. These three varieties were increased at all of the test fields for further study and observation. Some of the others, like C.P. Nos. 34-53 and 34-92, which showed particular promise were also increased in the regular fall planting of varieties.

Other unreleased varieties which made a comparatively good showing are as follows:

C.P. 34-21, Plant Cane—Glenwood,

C.P. 31-529, First Stubble—Cinclare, Glenwood, Reserve, Sterling and Billeaud,

C.P. 33-372, Plant Cane—Reserve; First Stubble—Glenwood and Sterling.

C.P. 33-224, First Stubble—Sharkey soil Cinclare; Second Stubble—Sterling and First Stubble—Youngsville.

The 1941 averages of percent sucrose, tons per acre and balance per acre figures, of plant cane, first and second stubble results for Cinclare and Reserve, and the plant cane and first stubble results for Glenwood, indicate that five comparable varieties ranked as follows:

| Test Field | C.P. 29-120 | C.P. 29-103 | C.P. 33-243 | C.P. 28-19 | C.P. 29-320 |
|---|---|---|---|---|---|
| Cinclare (Rank) | 1 | 2 | 3 | 4 | 5 |
| Glenwood " | 1 | 2 | 4 | 3 | 5 |
| Reserve " | 2 | 3 | 5 | 1 | 4 |
| Meeker* " | 2 | 5 | 4 | 3 | 1 |
| Shirley** " | 5 | 1 | 3 | 4 | 2 |
| | | | C.P. 29-116 | C.P. 31-529 | C.P. 28-11 |
| Cinclare*** " | 3 | 2 | 1 | 4 | 5 |

*Av. plant cane, first and second stubble.
**Av. plant cane, and first stubble.
***Av. plant cane and first stubble, Sharkey soil.

In the western section, the 1941 averages of percent sucrose, tons per acre and balance per acre figures of plant cane, first and second stubble for Sterling, and the plant cane and first stubble for Billeaud and Youngsville test fields, indicate that six comparable varieties ranked as follows:

| Test Field | C. P. 29-116 | Co. 290 | C. P. 29-103 | C. P. 29-120 | C. P. 33-243 | C. P. 29-320 |
|---|---|---|---|---|---|---|
| Sterling (Rank) | 1 | 2 | 3 | 4 | 5 | 6 |
| | | | C. P. 33-310 | | | |
| Billeaud " | 1 | 2 | 3 | 6 | 4 | 5 |
| | | | C. P. 33-224 | | | |
| Youngsville " | 1 | 2 | 3 | 5 | 6 | 4 |

In the alluvial section, C.P. 29-120 was the leading variety, followed by C.P. 29-103 at Cinclare and Glenwood; while at Reserve, C.P. 28-19 ranked first, C.P. 29-120 second, and C.P. 29-103 third.

In the Red River section, C.P. 29-320 ranked first at Meeker and second at Shirley; while C.P. 28-19 ranked third at Meeker and fourth at Shirley.

In the western area, C.P. 29-116 outranked Co. 290 at Sterling, Billeaud and Youngsville test fields.

Two unreleased varieties, C.P. 33-310 at Billeaud test field and C.P. 33-224 at Youngsville, made a very good showing by ranking third in the variety com-

parison. C.P. 33-425, another promising unreleased variety, gave favorable results as plant cane and first stubble at the Meeker test field.

Two of the more vigorous growing unreleased varieties, C.P. 33-409 and C.P. 34-1, were selected as possibilities for growing on very heavy "black lands" and poorly drained soils. These two varieties were planted in main plot tests, small plots and field block trials on heavy "black lands" and poorly drained soils. C.P. 33-409 is a very small diameter cane, about in the same class as C.P. 28-11 with comparable or slightly higher sucrose content. C.P. 34-1 is a cane very much on the order of C.P. 807 in diameter of stalk and sucrose content.

The results of 1941 and the past two seasons indicate that both C.P. 29-120 and C.P. 29-103 are very suitable as standard field varieties on a much more extensive scale in the alluvial sections of the Mississippi River, Bayou Lafourche, the Bunkie area and in Terrebonne, Iberia, St. Mary, St. Martin and on the better lands of Lafayette and Vermilion Parishes.

C.P. 29-120 is classed as a fairly good mill-windrowing cane, being slightly under Co. 281 in keeping qualities. C.P. 29-103 is not a windrowing cane, but ranks extremely high in cold resistant qualities. This variety has repeatedly proven its superiority to other standard field canes in showing much less deterioration as standing cane, when milled late in the grinding season after severe killing freezes. Both varieties give good response on the "mixed lands" and well drained "black lands" of the alluvial sections; while on very fertile "sandy lands" and light soils, they have a tendency to be late maturing as plant cane, and their use on such soils is not generally recommended.

# Recent Findings in the Control of Sugarcane Insects at the Houma Laboratory of the Bureau of Entomology and Plant Quarantine

*(J. W. Ingram, E. K. Bynum, T. E. Holloway, and R. Mathes, U. S. Department of Agriculture, Bureau of Entomology and Plant Quarantine)*

Investigations are conducted at the Houma, La., laboratory of the Bureau of Entomology and Plant Quarantine of the United States Department of Agriculture on the control of the sugarcane borer, the sugarcane beetle, insects that transfer sugarcane diseases, and other sugarcane insects in the continental United States. In addition, surveys are made in the sugarcane States for possible new pests. The following is a summary of recent findings in the control of sugarcane insects.

## The Sugarcane Borer

*Resistant Varieties of Cane.*—In a study of the susceptibility to the sugarcane borer (*Diatraea saccharalis* (F.) ) of seedling varieties of sugarcane bred at Canal Point, Fla., by the Division of Sugar Plant Investigations of the Bureau of Plant Industry, a total of over 7,000 seedlings have been examined in experimental plantings at Houma during the last several years. Data obtained have been of some value to the Division of Sugar Plant Investigations in rating the agronomic possibilities of these varieties. In addition, it has been found that certain parents produce borer-susceptible progeny, that others have progeny of average susceptibility, and that one parent, N.G. 251, gives seedlings resistant to borer injury. Seedling varieties found to be resistant to the borer are tested in field plots for several years to determine whether this borer resistance is maintained. Four varieties which have consistently shown borer resistance over a period of from 3 to 4 years were selected for planting at Canal Point, Fla., for use in breeding for borer resistance. The average infestation in these varieties for all years tested ranged from 26 to 61 percent of the infestation in Co. 281, a variety that has an average borer infestation.

Results of examinations of commercial varieties in various parts of the sugar section during the last 6 years show C.P. 29/103 to be the most heavily infested commercial variety, having had an average of 35 percent more joints bored than Co. 281. C.P. 29/116 was next in injury suffered, followed in order by Co. 281 (the standard in these comparisons), C.P. 29/320, C.P. 28/11, C.P. 28/19, and Co. 290. Co. 290 had 28 percent less joints bored than Co. 281.

Other varieties showing promise for commercial use have also been examined for borer susceptibility. Two of these C.P. 33/409 and C.P. 34/79, were found to sustain unusually low borer injury, having had about half as many joints bored as Co. 281 over a 3-year period.

*Biological control.*—In an attempt to find parasites of the sugarcane borer that will give effective control under Louisiana and Florida conditions, introductions are being made from other countries where the borer is present. The United States Department of Agriculture has a representative in South America at the present time searching for parasites of insects that are pests in the United States. In some cases these imported parasites are released directly in the field and in others they are bred at Houma and their progeny released. During 1941 over 2,000 Amazon flies (*Metagonistylum minense* (Towns.) ), the young of which feed on borer larvae, were released in Louisiana, and additional ones were sent to Florida. Certain parasites wasplike insects which attack borer larvae have already been imported and released in Louisiana. None of these introduced parasites have been effective up to the present time, but to judge from experiences elsewhere, one or more of them may increase to beneficial numbers after having been in Louisiana for a number of years, or other foreign species of parasites may be introduced that will be better adapted to Louisiana conditions. There is encouragement in the good degree of borer control obtained at Fellsmere, Fla., where 68 percent of the borer larvae were found killed by introduced parasites in September 1941, and where it was fairly difficult to find live borers.

*Insecticidal control.*—Investigations begun in 1937 to determine the possibilities of control by applying insecticides have given promising results. These experiments have been conducted in cooperation with the Louisiana Agricultural Experiment Station, and a paper prepared jointly with that agency will be published in a later issue of the Sugar Bulletin. From results obtained to date it appears that 90 percent or more of the first-generation borers can be killed, and profitable increases in yield can be obtained, by dusting with synthetic cryolite four times at weekly intervals in the spring. Fairly good control of second-generation borers has also been obtained by dusting four times at weekly intervals at the proper time during the summer with the same material.

There are, however, four or five generations yearly, and the borer population in a dusted area is able to increase considerably by harvesttime, especially if the treated area comprises only a few acres into which moths can readily fly from nearby untreated fields. Thus it is apparent that more effective control may be realized from the dusting of larger acreages. Over 500 acres of cane have been dusted this year on Reserve Plantation to control first-generation borers, and large acreages have also been dusted on Cypremort, Little Texas, and Oaklawn Plantations. Other areas will be dusted to control second-generation borers.

*Control by roguing out dead hearts.*—During 1941, five large-acreage experiments were conducted in roguing out dead hearts caused by first-generation borers. In these experiments fields were gone through four times and dead hearts were cut out and the borers destroyed. The average cost of roguing 1 acre four times was $1.01, and an estimated average of 192 borers per acre were removed. In August the average percentage of stalks bored in the rogued plots for all experiments was 51.7, as compared with 70.3 in the nonrogued check plots. At harvesttime the proportion of joints bored in the rogued plots averaged 25 percent less than in the nonrogued check plots. This difference would undoubtedly have been much greater but for the fact that the rogued area in one experiment had four times the borer population of the check area before the experiment was begun. Results to date indicate that roguing borers of the first-generation is of much value in borer control. Roguing out borers of later generations is of little value, however, since probably less than 50 percent of the borer injury results in dead hearts at this time and thus a smaller percentage of the borers are killed. Also, cane apparently suffers more injury from roguing for the later generations of borers.

*Control by winter clean-up.*—During the winter of 1939-40 there was a heavy mortality of overwintering borers due to the unusually low temperatures. As a result, an average of only 5.27 percent of the joints were found bored at harvesttime in 1940 as compared with 19.74 percent in 1939, following a more normal winter. This clearly shows the value of any factor that will decrease the number of overwintering borers.

Extensive experiments over a period of several years have shown that cane trash left in the field at harvesttime is usually the most important source of infestation in the spring, followed in order by shoots of summer-planted cane, cane stubs, and fall-planted seed cane. Experiments were begun during the 1941 harvest to determine the benefit of running an additional cart behind the cane loader to pick up millable cane left in the field. It was found that enough millable cane was saved in all cases to yield a small profit from this operation in addition to destroying the borers that would have overwintered in this material.

Experiments to date indicate that there is little difference in the numbers of borers surviving in cane trash whether the harvesting is done by machine or by hand. The number surviving in stubs is, of course, decreased by the method in which the cane is cut closest to the ground.

*Sugarcane borer bulletin.*—The United States Department of Agriculture has recently issued Farmers' Bulletin 1884, "The Sugarcane Borer." A copy of this bulletin may be obtained from the Department in Washington or from the Houma Laboratory of the Federal Bureau of Entomology and Plant Quarantine. In this bulletin the following measures are recommended for borer control:

(1) Make a more thorough clean-up of pieces of millable cane during harvesting operations to eliminate the overwintering of borers in these large pieces.

(2) After harvesting, thoroughly burn the trash as soon as it is dry, to destroy overwintering borers.

(3) During the winter cut and burn all large grasses in which borers might hibernate in and around fields.

(4) Cut low when harvesting cane to decrease the number of borers overwintering in cane stubs and to increase sucrose production.

(5) Flood fields for 3 or 4 days after harvest, if this can be done with little expense, to kill overwintering borers.

(6) Select seed cane as free from borers as possible so as to secure a better stand and to decrease the number of borers overwintering in planted canes.

(7) For small plantings, if it can be done with little expense, soak seed cane in cold water for 72 hours to kill the borers in it before planting.

(8) Where agronomically practical, plant the resistant variety Co. 290 in areas of heavy borer injury and refrain from planting the susceptible varieties C.P. 29/116 and C.P. 29/103 in such areas.

## The Sharp-Nosed Grain Leafhopper

In cooperation with E. V. Abbott of the Bureau of Plant Industry, the sharp-nosed grain leafhopper (*Draeculacephala portola* Ball) was found to be a carrier of chlorotic streak disease of sugarcane. This insect is present in abundance throughout the sugar section. Survey studies have shown that, excluding mealybugs, this insect is usually more abundant in Louisiana sugarcane fields than the total of all other sucking insect on sugarcane.

## The Sugarcane Beetle

The sugarcane beetle (*Euetheola rugiceps* (Lec.) ) has caused very little damage during the last few years, and this year the damage has been even less than usual. While destruction of sodlands on headlands and roadways and in pastures has undoubtedly done much to decrease beetle numbers, it is good insurance, in areas which formerly suffered heavy beetle damage, to continue growing those canes that give a good stand at the height of the time of beetle injury. This year's stand counts in the Bureau of Plant Industry test fields on light soil on Oaklawn and Albania Plantations showed that the commercial varieties giving the best stands as plant and stubble cane at the height of beetle injury were Co. 290 and C.P. 29/116; and on heavy soil on Oaklawn Plantation those giving the best stands as plant and as stubble cane were C.P. 28/11, C.P. 807, and C.P. 29/116.

## West Indian Sugarcane Mite

A program for eradication of the West Indian sugarcane mite (*Tarsonemus bancrofti* Michael) is being conducted in southern Florida where this pest has become established in only a small area. Results to date give good promise of success.

## Survey of other Sugarcane Areas

Once every year experimental and commercial plantings of sugarcane are examined in Mississippi, Alabama, Georgia, and Flordia for pests that may have gained entrance into these areas and to determine the status of known pests in each area. In this

connection it might be stated that the West Indian sugarcane fulgorid ( *Saccharosydne saccharivora* (Westwood) ) is found in Florida and Georgia, but has not been found elsewhere in the continental United States. Although this insect seldom causes serious injury, it appears advisable to strip off all leaves and treat with hot water any cane to be moved into Louisiana from those areas. On the other hand, there are sugarcane insects in Louisiana that are not found in other Southern States, and it would be inadvisable to move sugarcane from any infested area without proper treatment to destroy any pests it may harbor.

## The Hot Water Treatment of Cane Seed

*(W. J. Luke and C. W. Edgerton)*

The results which have been obtained thus far in the field tests in various parts of the sugar belt indicate that there is a probability that sugarcane yields with certain varieties can be increased by treating the seed cane with hot water. While it is admitted that these tests have not been conducted long enough to speak with certainty, it is felt that under the present sugar shortage conditions the results should be brought to the attention of the sugar planters. The sugar industry should not overlook the possibility of increasing the total production in the State by 10,000 to 50,000 tons of sugar.

The large scale field tests are now in the second year. During the first year (1941-1942,) as reported in Bulletin No. 336 of the Louisiana Agricultural Experiment Station, the hot water treatment increased yields of C.P. 29-320 and C.P. 28-19 by 3 to 4 tons per acre (average of 9 field tests). The second year tests are low in progress but the stand counts indicate that with normal weather conditions similar increased yields can again be expected from the hot water treatment. The stand counts which were obtained in April and May are presented in the table. An examination of the table shows that a large percentage of the plots planted with treated cane have appreciably better stands this spring than the plots planted with untreated cane.

Based on the results of the large scale field tests and a number of small scale tests conducted at Baton Rouge during previous years, it is recommended that growers who have the necessary facilities treat seed cane of the varieties C.P. 29-320 and C.P. 28-19 for September and October plantings. This should not only provide acreages free of the chlorotic streak disease but under ordinary weather conditions should increase the yields of sugar per acre. At the present time it is not recommended that seed cane planted in August and November be treated.

It is not recommended that seed cane of the variety Co. 290 be treated. In normal years no serious trouble would result from the treatment, but in dry falls there might be a deterioration of the treated seed cane. Co. 290 is very rarely affected with chlorotic streak and consequently there is no necessity of treating this variety for the control of the disease.

Not enough information is at present available to make definite recommendations in regard to other varieties. There is, however, no evidence to suggest that these varieties would be injured by the treatment.

**Stand Counts in Field Tests with Hot Water Treatment**
**Total number of plants on four plots, each 1/80 acre in size. 1942.**

| Plantation | Date of planting 1941 | Date of count 1942 | Stand Counts | | | |
|---|---|---|---|---|---|---|
| | | | C. P. 29-320 | | Second Variety* | |
| | | | Check | Treated | Check | Treated |
| Raceland | Aug. 5 | April 16 | 1383 | 1261 | 1028 | 1541 |
| | Sept. 5 | April 16 | 1486 | 1517 | 812 | 1646 |
| | Oct. 13 | May 7 | 320 | 440 | 134 | 282 |
| | Oct. 28 | May 7 | 258 | 388 | 281 | 440 |
| Greenwood | Aug. 12 | April 16 | 1734 | 1552 | 1814 | 2246 |
| | Sept. 9 | April 16 | 1494 | 1829 | 1321 | 2140 |
| | Oct. 1 | May 7 | 591 | 997 | 754 | 1513 |
| | Oct. 28 | May 7 | 382 | 619 | 293 | 586 |
| Glenwood | Aug. 20 | April 16 | 1086 | 868 | 1486 | 976 |
| | Sept. 8 | April 16 | 946 | 1500 | 1583 | 2073 |
| | Oct. 13 | May 7 | 403 | 615 | 439 | 608 |
| | Oct. 29 | May 7 | 350 | 433 | 335 | 436 |
| Westover | Aug. 12 | April 17 | 1812 | 2085 | 1373 | 1857 |
| | Sept. 13 | April 17 | 754 | 963 | 481 | 676 |
| | Oct. 14 | May 8 | 493 | 776 | 556 | 842 |
| | Oct. 31 | May 8 | 424 | 663 | 429 | 553 |
| Meeker | Aug. 19 | April 15 | 279 | 342 | 585 | 439 |
| | Sept. 12 | April 15 | 374 | 517 | 410 | 635 |
| | Oct. 8 | May 6 | 272 | 530 | 467 | 512 |
| | Nov. 7 | May 6 | 241 | 188 | 446 | 213 |
| Montegut | Aug. 11 | April 15 | 1024 | 815 | 1854 | 1836 |
| | Sept. 10 | April 15 | 363 | 491 | 557 | 812 |
| | Oct. 9 | May 7 | 204 | 584 | 518 | 672 |
| | Oct. 29 | May 7 | 315 | 524 | 518 | 760 |
| Billeaud | Aug. 27 | April 15 | 1086 | 1307 | 1998 | 1846 |
| | Sept. 19 | April 15 | 531 | 876 | 1458 | 1833 |
| | Oct. 7 | May 6 | 542 | 876 | 880 | 1086 |
| | Nov. 13 | May 6 | 480 | 494 | 562 | 218 |
| Albania | Aug. 19 | April 15 | 478 | 711 | 1239 | 1182 |
| | Sept. 18 | April 15 | 943 | 1748 | 1461 | 1451 |
| | Oct. 6 | May 6 | 418 | 903 | 703 | 1302 |
| | Nov. 19 | May 6 | 255 | 477 | 517 | 573 |
| Cinclare | Aug. 15 | April 17 | 412 | 330 | 248 | 279 |
| | Sept. 6 | April 17 | 664 | 601 | 470 | 487 |
| | Sept. 29 | May 7 | 1002 | 968 | 592 | 1001 |
| | Oct. 27 | May 7 | 566 | 1073 | 328 | 556 |

*Second variety: C. P. 28-19 at Raceland, Greenwood, Glenwood, Westover; Meeker, and Montegut; C. P. 29-116 at Billeaud; Co. 290 at Albania; Co. 281 at Cinclare.

**PAUL, RICE & LEVY**
INCORPORATED
Wholesale
INDUSTRIAL, MILL & MARINE
SUPPLIES
Day, Ra. 6123 Night, Fr. 2019
501-505 Poydras St.
New Orleans, - - La.
O I C VALVES
GUILD & GARRISON PUMPS
INTERNATIONAL INDUSTRIAL
PAINTS
CHESTERTON PACKING
K-TING MANILA ROPE
CONSOL OILS
VULCAN SOOT BLOWERS

# Results of Sugarcane Variety Tests in Louisiana during 1941

*(By George Arceneaux, Agronomist, Leo P. Hebert, Junior Agronomist, and C. C. Krumbhaar, Agent[1]*
*Division of Sugar Plant Investigations,*
*Bureau of Plant Industry, U. S. Department of Agriculture.)*

## Introduction

Variety tests conducted by the U. S. Department of Agriculture in Louisiana during 1941 and briefly summarized in this report were, in general, quite similar to tests conducted during the past and described in previous reports (2, 4). A limited group of the most important varieties were included in extensively replicated plant-cane and stubble tests on light soil[2] in each of nine localities. Adaptable varieties were also tested on heavy soils in four of the localities, and on muck soil in one locality.

Plant-cane yields during 1941 approached normal but yields from the stubble crop were, on the whole, relatively poor. In striking contrast with conditions generally prevailing, the most serious cases of stand failure during 1941 occurred in first stubble instead of second stubble. Stands of stubble cane, especially in the case of Co. 290 and C.P. 29/320, were greatly affected by harvest-date of the preceding crop. In general, wherever the cane had not been harvested prior to the freeze of November 15, 1940 the succeeding stubble crop was quite poor.

## Main tests on light soil

Tables 1, 2, and 3 summarize results obtained in the main tests on light soils. In line with the practice followed during the past, second stubble tests were conducted only at the five stations located in areas where it is customary to keep second stubble.

**TABLE 3. Results of Second Stubble Variety Tests on Light Soils in Louisiana During 1941.**

| Variety | Greenwood (Thibodaux) Oct. 20 (a) | Godchaux (Raceland) Oct. 22 | Alma (Lakeland) Oct. 27 | Rosewood (Hamburg) Oct. 30 | Houma Station Oct. 24 | Average |
|---|---|---|---|---|---|---|
| Average Yield of Cane Per Acre (Tons) | | | | | | |
| Co. 281 | 15.7 | 10.8 | 15.4 | 18.9 | 10.4 | 14.24 |
| Co. 290 | 26.8 | 23.6 | 24.9 | 28.0 | 21.3 | 24.92 |
| C. P. 28/11 | 19.9 | 16.6 | 27.2 | 23.1 | 15.2 | 20.40 |
| C. P. 28/19 | 17.5 | 17.5 | 18.7 | 18.5 | 16.2 | 17.68 |
| C. P. 29/116 | 30.3 | 25.3 | 28.8 | 29.4 | 23.4 | 27.44 |
| C. P. 29/320 | 18.6 | 17.9 | 17.0 | 23.5 | 14.1 | 18.22 |
| Difference | | | | | | |
| For P. = .05 | 2.20 | 2.17 | 2.72 | 2.00 | 3.15 | |
| For P. = .01 | 3.00 | 2.97 | 3.63 | 2.73 | 4.26 | |
| Average Indicated Yield of 96° Sugar Per Ton of Cane (Pounds) | | | | | | |
| Co. 281 | 137.4 | 149.3 | 147.4 | 167.1 | 160.7 | 152.7 |
| Co. 290 | 151.8 | 150.5 | 146 7 | 169.4 | 160.7 | 156.0 |
| C. P. 28/11 | 171.4 | 187.9 | 161.1 | 183.0 | 175.2 | 174.5 |
| C. P. 28/19 | 176.8 | 150.8 | 204.5 | 205.3 | 187.1 | 185.4 |
| C. P. 29/116 | 138.4 | 132.3 | 150.2 | 151.9 | 173.7 | 148.7 |
| C. P. 29/320 | 177.7 | 174.9 | 179.8 | 189.3 | 185.6 | 181.8 |
| Difference | | | | | | |
| For P. = .05 | 8.82 | 14.18 | 8.63 | 7.32 | 13.07 | |
| For P. = .01 | 12.03 | 19.38 | 11.52 | 9.99 | 17.69 | |
| Average Indicated Yield of 96° Sugar Per Acre (Pounds) | | | | | | |
| Co. 281 | 2157 | 1612 | 2270 | 3158 | 1671 | 2174 |
| Co. 290 | 4068 | 3552 | 3653 | 4743 | 3423 | 3888 |
| C. P. 28/11 | 3411 | 3119 | 4382 | 4227 | 2663 | 3560 |
| C. P. 28/19 | 3094 | 2639 | 3824 | 3798 | 3031 | 3277 |
| C. P. 29/116 | 4193 | 3347 | 4326 | 4466 | 4065 | 4079 |
| C. P. 29/320 | 3305 | 3131 | 3057 | 4448 | 2617 | 3312 |
| Difference | | | | | | |
| For P. = .05 | 335 | 356 | 359 | 332 | 398 | |
| For P. = .01 | 457 | 487 | 479 | 453 | 538 | |

(a) Date of harvest.

Of special interest are the plant-cane and first stubble results obtained with the more recently released* varieties C.P. 29/103 and C.P. 29/120 (tables 1, 2). In line with results obtained in previous tests these varieties gave indicated yields of sugar per ton of cane significantly under yields from C.P. 28/19 but, on the whole, definitely higher than yields obtained with Co. 281. It is interesting to note that in the average of all tests C.P. 29/120 gave approximately the same yield of sugar per ton of cane as obtained from C.P. 29/320, while a slightly lower indicated yield was obtained from C.P. 29/103.

C.P. 29/103 produced, in the average of 17 plant-

**TABLE 1. Results of Plant Cane Variety Tests on Light Soils in Louisiana During 1941.**

| Variety | Greenwood (Thibodaux) Nov. 28 (a) | Godchaux (Raceland) Dec. 3 | Albania (Jeanerette) Nov. 20 | Leon J. Landry (New Iberia) Nov. 25 | Roland's Farm (Erath) Nov. 24 | Stella (St. Martinville) Nov. 25 | Alma (Lakeland) Nov. 17 | Rosewood (Hamburg) Nov. 19 | Oaklawn (Franklin) Dec. 1 | Average (b) |
|---|---|---|---|---|---|---|---|---|---|---|
| Average Yield of Cane Per Acre (Tons) | | | | | | | | | | |
| Co. 281 | 24.8 | 27.0 | 23.3 | 18.1 | 20.6 | 27.6 | 29.2 | 23.6 | 11.8 | 22.30 |
| Co. 290 | 30.0 | 35.9 | 30.8 | 28.8 | 29.2 | 37.4 | 38.7 | 32.2 | 15.0 | 30.07 |
| C. P. 28/19 | 23.8 | 28.6 | 22.1 | 17.6 | 21.0 | 26.3 | 26.4 | 21.8 | 12.6 | 21.74 |
| C. P. 29/103 | 26.5 | 35.1 | 24.4 | 25.4 | 22.1 | ---- | 34.2 | 27.0 | 13.3 | 26.00 |
| C. P. 29/116 | 33.9 | 41.8 | 32.4 | 30.8 | 30.0 | 39.1 | 41.9 | 35.1 | 13.8 | 32.46 |
| C. P. 29/120 | 27.0 | 33.3 | 23.7 | 23.2 | 21.4 | ---- | 32.2 | 25.1 | 14.7 | 25.07 |
| C. P. 29/320 | 24.3 | 28.0 | 24.1 | 16.0 | 14.5 | 26.5 | 28.8 | 27.5 | 10.9 | 21.76 |
| Difference | | | | | | | | | | |
| For P. = .05 | 4.07 | 3.32 | 2.78 | 2.30 | 3.50 | 2.77 | 3.30 | 2.54 | 1.42 | |
| For P. = .01 | 5.52 | 4.50 | 3.79 | 3.11 | 4.74 | 3.88 | 4.48 | 3.44 | 1.93 | |
| Average Indicated Yield of 96° Sugar Per Ton of Cane (Pounds) | | | | | | | | | | |
| Co. 281 | 214.7 | 131.0 | 204.7 | 230.2 | 194.4 | 190.6 | 149.0 | 174.7 | 214.5 | 183.9 |
| Co. 290 | 203.7 | 155.5 | 195.9 | 204.6 | 187.0 | 167.1 | 131.6 | 154.6 | 207.8 | 175.7 |
| C. P. 28/19 | 217.7 | 159.4 | 237.4 | 258.1 | 249.4 | 167.8 | 206.7 | 228.8 | 247.8 | 220.4 |
| C. P. 29/103 | 203.0 | 153.9 | 203.1 | 220.1 | 212.8 | ---- | 162.3 | 195.3 | 224.4 | 191.5 |
| C. P. 29/116 | 173.5 | 115.9 | 171.4 | 169.1 | 178.0 | 168.3 | 144.1 | 132.8 | 203.0 | 155.3 |
| C. P. 29/120 | 208.2 | 144.6 | 216.5 | 208.2 | 196.3 | ---- | 167.3 | 195.3 | 217.8 | 189.9 |
| C. P. 29/320 | 215.0 | 149.4 | 219.1 | 222.2 | 215.4 | 211.9 | 177.8 | 203.7 | 218.2 | 198.0 |
| Difference | | | | | | | | | | |
| For P. = .05 | 9.26 | 23.14 | 10.13 | 8.93 | 12.08 | 10.13 | 11.20 | (c) | 6.18 | |
| For P. = .01 | 12.56 | 31.36 | 13.73 | 12.11 | 16.37 | 14.21 | 15.17 | | 8.37 | |
| Average Indicated Yield of 96° Sugar Per Acre (Pounds) | | | | | | | | | | |
| Co. 281 | 5325 | 3537 | 4769 | 4167 | 4005 | 5261 | 4351 | 4123 | 2531 | 4101 |
| Co. 290 | 6111 | 5582 | 6034 | 5892 | 5460 | 6249 | 5093 | 4978 | 3117 | 5283 |
| C. P. 28/19 | 5181 | 4559 | 5246 | 4543 | 5237 | 4413 | 5457 | 4988 | 3122 | 4792 |
| C. P. 29/103 | 5379 | 5402 | 4956 | 5590 | 4703 | ---- | 5551 | 5273 | 2984 | 4980 |
| C. P. 29/116 | 5882 | 4845 | 5553 | 5208 | 5340 | 6580 | 6038 | 4661 | 2801 | 5041 |
| C. P. 29/120 | 5621 | 4815 | 5131 | 4830 | 4201 | ---- | 5387 | 4902 | 3202 | 4761 |
| C. P. 29/320 | 5224 | 4183 | 5280 | 3555 | 3123 | 5615 | 5121 | 5602 | 2378 | 4308 |
| Difference | | | | | | | | | | |
| For P. = .05 | 474 | 506 | 416 | 380 | 452 | 423 | 433 | (c) | 285 | |
| For P. = .01 | 642 | 685 | 564 | 515 | 613 | 593 | 586 | | 386 | |

(a) Date of harvest.
(b) Average of 8 stations. Stella results omitted.
(c) Samples composited for complete milling test.

TABLE 2. Results of First Stubble Variety Tests on Light Soils in Louisiana During 1941.

| Variety | Greenwood (Thibodaux) Nov. 10 (a) | Godchaux (Raceland) Nov. 12 | Oaklawn (Franklin) Nov. 4 | Albania (Jeanerette) Nov. 5 | Leon J. Landry (New Iberia) Nov. 7 | Roland's Farm (Erath) Nov. 6 | Alma (Lakeland) Oct. 27 | Rosewood (Hamburg) Oct. 31 | Houma Station Oct. 29 | Average |
|---|---|---|---|---|---|---|---|---|---|---|
| Average Yield of Cane Per Acre (Tons) | | | | | | | | | | |
| Co. 281 | 10.4 | 16.4 | 10.5 | 8.4 | 7.0 | 11.2 | 12.5 | 2.2 | 14.8 | 10.38 |
| Co. 290 | 20.2 | 26.2 | 19.2 | 15.2 | 15.3 | 21.1 | 22.0 | 9.3 | 23.2 | 19.08 |
| C. P. 28/19 | 23.2 | 22.1 | 13.9 | 10.7 | 10.6 | 9.8 | 14.4 | 9.4 | 21.6 | 15.08 |
| C. P. 29/103 | 23.7 | 26.9 | 14.8 | 19.5 | 12.4 | 14.3 | 28.4 | 16.1 | 19.1 | 19.47 |
| C. P. 29/120 | 22.3 | 25.0 | 15.7 | 12.9 | 12.2 | 15.2 | 26.1 | 15.1 | 26.3 | 18.98 |
| C. P. 29/320 | 17.5 | 22.0 | 9.1 | 8.1 | 7.1 | 8.9 | 12.6 | 5.8 | 19.3 | 12.27 |
| Difference | | | | | | | | | | |
| For P. = .05 | 4.50 | 2.13 | 3.23 | 3.40 | 1.87 | 3.39 | 3.14 | 2.70 | 2.90 | |
| For P. = .01 | 6.14 | 2.91 | 4.41 | 4.64 | 2.55 | 4.59 | 4.28 | 3.68 | 3.92 | |
| Average Indicated Yield of 96° Sugar Per Ton of Cane (Pounds) | | | | | | | | | | |
| Co. 281 | 177.6 | 193.0 | 180.9 | 212.5 | 202.5 | 204.2 | 130.4 | 153.5 | 179.6 | 180.0 |
| Co. 290 | 182.0 | 188.2 | 181.8 | 202.1 | 201.1 | 185.0 | 144.0 | 165.4 | 162.4 | 178.3 |
| C. P. 28/19 | 217.4 | 221.0 | 224.5 | 250.2 | 239.7 | 242.2 | 192.3 | 211.2 | 198.3 | 218.7 |
| C. P. 29/103 | 201.6 | 200.4 | 199.3 | 237.5 | 230.7 | 199.7 | 180.7 | 215.7 | 153.4 | 199.7 |
| C. P. 29/120 | 210.5 | 213.1 | 203.9 | 243.6 | 217.4 | 225.0 | 175.8 | 209.4 | 193.1 | 206.5 |
| C. P. 29/320 | 204.3 | 211.7 | 198.0 | 220.4 | 211.0 | 204.7 | 180.3 | 177.2 | 186.4 | 199.6 |
| Difference | | | | | | | | | | |
| For P. = .05 | 11.55 | 10.67 | 13.08 | 6.57 | 12.52 | 8.03 | 12.56 | 13.07 | 13.40 | |
| For P. = .01 | 15.75 | 14.55 | 17.85 | 8.97 | 17.07 | 10.86 | 17.17 | 17.82 | 18.13 | |
| Average Indicated Yield of 96° Sugar Per Acre (Pounds) | | | | | | | | | | |
| Co. 281 | 1847 | 3165 | 1899 | 1785 | 1417 | 2287 | 1630 | 338 | 2411 | 1864 |
| Co. 290 | 3676 | 4931 | 3491 | 3072 | 3077 | 3903 | 3168 | 1538 | 3768 | 3403 |
| C. P. 28/19 | 5044 | 4884 | 3120 | 2677 | 2541 | 2374 | 2769 | 1985 | 4283 | 3297 |
| C. P. 29/103 | 4778 | 5391 | 2950 | 4631 | 2861 | 2856 | 5132 | 3473 | 2930 | 3889 |
| C. P. 29/120 | 4694 | 5327 | 3201 | 3142 | 2652 | 3420 | 4588 | 3162 | 5078 | 3918 |
| C. P. 29/320 | 3575 | 4657 | 1802 | 1785 | 1498 | 1822 | 2272 | 1028 | 3597 | 2448 |
| Difference | | | | | | | | | | |
| For P. = .05 | 484 | 378 | 414 | 423 | 337 | 411 | 400 | 364 | 402 | |
| For P. = .01 | 660 | 515 | 565 | 576 | 460 | 556 | 545 | 497 | 544 | |

(a) Date of harvest.

cane and first stubble tests, more sugar per acre than any of the other varieties included in the tests. It was 303 pounds below Co. 290 in the average of plant-cane tests but exceeded Co. 290 by 486 pounds in the average of first stubble tests. In the average of all tests the yield of sugar per acre from C.P. 29/120 was slightly and apparently insignificantly under the average yield from C.P. 29/103.

C.P. 29/116 outyielded Co. 290 in cane per acre in 8 out of 9 plant-cane tests and in each of the 5 second stubble tests. Comparisons between these two varieties are not available in first stubble but yield levels maintained by Co. 290 in comparison with other varieties in that series indicate a greatly lowered productivity as compared with results obtained during previous years. Confirming results obtained on light soils during previous years, C.P. 29/116 proved definitely inferior to Co. 290 in indicated yield of sugar per ton of cane. The disastrously low average yields of sugar per ton of cane obtained in plant-cane tests at Raceland and Rosewood (table 1), emphasize the danger of growing C.P. 29/116 on light soils of the areas involved. On the other hand, C.P. 29/116 produced cane of satisfactory quality on light soils of the Teche and Prairie areas.

C.P. 28/19 displayed its usual superiority to C.P. 29/320 in yield of sugar per ton of cane in plant-cane and first stubble tests with average differences of 22.4 and 19.1 pounds respectively. In second stubble tests, however, the average difference was only 3.6 pounds in favor of C.P. 28/19. It will be noted that in the Raceland test of the latter series C.P. 28/19 was 24.1 pounds *under* C.P. 29/320 in indicated yield of sugar per ton of cane. In this test C.P. 28/19 was badly lodged and had produced numerous late suckers by harvest-time.

As indicated by average differences of 484 and 849 pounds respectively, C.P. 28/19 greatly surpassed C.P. 29/320 in yield of sugar per acre in plant-cane and first stubble tests. In second stubble tests, however, the two varieties averaged approximately the same in yield of sugar per acre. This condition represents a very substantial drop in the relative yields of C.P. 29/320 as compared with yields obtained during previous years. That the performance of C.P. 29/320 as compared with C.P. 28/19 was extensively bad is indicated by its significantly lower yield of sugar per acre in 13 out of 23 comparisons. In this connection mention should be made of the extremely poor results obtained with C.P. 29/320 in tests at Erath and at some of the stations in the Teche area, especially in first stubble.

C.P. 28/11, which was tested as second stubble only in the light soil series surpassed C.P. 29/320 and C.P. 28/19 in average indicated yield of sugar per acre by differences of 248 and 283 pounds respectively. However, it again displayed its usual inferiority to the latter varieties in average indicated yield of sugar per ton of cane.

Co. 281 gave rather consistently the lowest yields of sugar per acre of any variety in the group. As is quite generally appreciated, the variety's satisfactory windrowing qualities, which are not possessed in the same degree by any of the other released varieties, must be regarded as the only reason for the continuance of its cultivation for commercial purposes.

## Tests on heavy soil

In contrast with results of tests on light soils C.P. 29/116 gave an indicated yield of sugar per ton of cane approximately the same as obtained with Co. 290 in the average of all tests on heavy soils (tables 4, 5). This is in agreement with results obtained during the past three years. It was, on the whole, definitely superior to Co. 290 in yield of cane per acre, and surpassed the latter in indicated yield of sugar per acre by average differences of 636 pounds in plant-cane and 1292 pounds in first stubble.

Average yields of cane per acre, sugar per ton of cane and sugar per acre obtained with C.P. 807 were, on the whole, closely similar to yields obtained with Co. 290.

C.P. 28/11 consistently surpassed Co. 290 in indicated yield of sugar per ton of cane. Indicated yields of sugar per acre were approximately the same for the two varieties in the average of plant-cane tests but showed an average difference of 795 pounds in

favor of C.P. 28/11 in first stubble tests.

Results obtained with C.P. 29/103 and C.P. 29/120 in this series of tests are considered worthy of note. With indicated yields of sugar per ton of cane, on the whole, slightly better than obtained with C.P. 28/11 both of these varieties were consistently among the highest producers of sugar per acre. In the average of the 4 plant-cane tests each of these varieties gave an indicated yield of sugar per acre approximately 100 pounds below that from C.P. 29/116, the top ranking variety. In the average of first stubble tests C.P. 29/103 was 361 pounds, and C.P. 29/120 124 pounds below C.P. 29/116 in this respect.

**TABLE 4. Results of Plant Cane Variety Tests on Heavy Soils in Louisiana During 1941.**

| Variety | Godchaux (Raceland) Dec. 3 (a) | Oaklawn (Franklin) Nov. 26 | Alma (Lakeland) Nov. 17 | Houma Station Nov. 14 | Average |
|---|---|---|---|---|---|
| Average Yield of Cane Per Acre (Tons) | | | | | |
| Co. 290 | 35.8 | 16.4 | 32.7 | 11.5 | 24.10 |
| C. P. 807 | 32.6 | 19.7 | 30.0 | 13.4 | 23.92 |
| C. P. 28/11 | 27.8 | 14.2 | 26.2 | 14.0 | 20.55 |
| C. P. 29/103 | 32.0 | 18.3 | 26.4 | 15.5 | 23.05 |
| C. P. 29/116 | 38.4 | 24.1 | 33.3 | 16.7 | 28.12 |
| C. P. 29/120 | 32.1 | 20.4 | 28.4 | 14.9 | 23.95 |
| Difference | | | | | |
| For P. = .05 | 2.85 | 5.13 | 3.23 | 1.86 | |
| For P. = .01 | 3.94 | 7.09 | 4.47 | 2.54 | |
| Average Indicated Yield of 96° Sugar Per Ton of Cane (Pounds) | | | | | |
| Co. 290 | 164.2 | 163.3 | 146.0 | 158.2 | 157.1 |
| C. P. 807 | 166.0 | 164.1 | 147.6 | 105.5 | 151.4 |
| C. P. 28/11 | 204.6 | 196.7 | 159.9 | 156.5 | 180.8 |
| C. P. 29/103 | 193.2 | 198.6 | 178.8 | 177.0 | 187.4 |
| C. P. 29/116 | 151.4 | 168.3 | 146.5 | 176.3 | 157.3 |
| C. P. 29/120 | 180.8 | 198.4 | 165.7 | 182.9 | 180.4 |
| Difference | | | | | |
| For P. = .05 | 13.44 | 10.18 | 12.88 | 21.13 | |
| For P. = .01 | 18.59 | 14.08 | 17.81 | 28.81 | |
| Average Indicated Yield of 96° Sugar Per Acre (Pounds) | | | | | |
| Co. 290 | 5878 | 2678 | 4774 | 1819 | 3787 |
| C. P. 807 | 5412 | 3233 | 4428 | 1414 | 3622 |
| C. P. 28/11 | 5688 | 2793 | 4189 | 2191 | 3715 |
| C. P. 29/103 | 6182 | 3634 | 4720 | 2743 | 4320 |
| C. P. 29/116 | 5814 | 4056 | 4878 | 2944 | 4423 |
| C. P. 29/120 | 5804 | 4047 | 4706 | 2725 | 4320 |
| Difference | | | | | |
| For P. = .05 | 450 | 489 | 435 | 354 | |
| For P. = .01 | 622 | 676 | 602 | 482 | |

(a) Date of harvest.

**TABLE 5—Results of First Stubble Variety Test on Heavy Soil in Louisiana During 1941.**

| Variety | Greenwood (Thibodaux) Nov. 10 (a) | Oaklawn (Franklin) Nov. 26 | Alma (Lakeland) Oct. 28 | Average |
|---|---|---|---|---|
| Average Yield of Cane Per Acre (Tons) | | | | |
| Co. 290 | 6.1 | 19.6 | 19.9 | 15.20 |
| C. P. 807 | 15.3 | 14.1 | 13.9 | 14.43 |
| C. P. 28/11 | 12.8 | 17.5 | 23.5 | 17.93 |
| C. P. 29/103 | 8.9 | 19.3 | 23.6 | 17.27 |
| C. P. 29/116 | 20.1 | 20.8 | 25.5 | 22.13 |
| C. P. 29/120 | 15.8 | 17.9 | 19.2 | 17.63 |
| Difference | | | | |
| For P. = .05 | 3.11 | 2.46 | 4.62 | |
| For P. = .01 | 4.24 | 3.35 | 6.26 | |
| Average Indicated Yield of 96° Sugar Per Ton of Cane (Pounds) | | | | |
| Co. 290 | 176.4 | 168.6 | 144.0 | 158.9 |
| C. P. 807 | 183.1 | 150.8 | 151.9 | 162.6 |
| C. P. 28/11 | 202.1 | 181.2 | 164.9 | 179.1 |
| C. P. 29/103 | 202.1 | 191.3 | 192.8 | 193.8 |
| C. P. 29/116 | 182.8 | 169.7 | 153.7 | 167.6 |
| C. P. 29/120 | 220.1 | 195.4 | 196.7 | 203.3 |
| Difference | | | | |
| For P. = .05 | 13.57 | 11.72 | 10.10 | |
| For P. = .01 | 18.50 | 15.98 | 13.67 | |
| Average Indicated Yield of 96° Sugar Per Acre (Pounds) | | | | |
| Co. 290 | 1076 | 3305 | 2866 | 2416 |
| C. P. 807 | 2801 | 2126 | 2111 | 2346 |
| C. P. 28/11 | 2587 | 3171 | 3875 | 3211 |
| C. P. 29/103 | 1799 | 3692 | 4550 | 3347 |
| C. P. 29/116 | 3674 | 3530 | 3919 | 3708 |
| C. P. 29/120 | 3478 | 3498 | 3777 | 3584 |
| Difference | | | | |
| For P. = .05 | 404 | 367 | 451 | |
| For P. = .01 | 551 | 501 | 610 | |

(a) Date of harvest.

## Arrowing in C.P. 29/116 and other varieties

Toward the end of the harvest period several of the commercial varieties showed extensive boenting and in many cases some arrowing. This condition was especially marked in the varieties C.P. 29/116, C.P. 29/103, and C.P. 29/120. Fig. 1 taken on December 22, 1941 shows an extreme case of arrowing in a field of C.P. 29/116 on Alice C. Plantation near Franklin.

The above mentioned varieties have been grown, including experimental tests, in Louisiana for a period of 10 years, and had not previously displayed any unusual tendency to flower. There is therefore no reason to attach any great importance to observations in this connection. It is likely that the condition was brought about as a result of some unusual aspect of the prevailing weather, possibly the abnormally high temperatures experienced during the month of October.

## Tests of new seedlings

In preliminary yield trials results of which are summarized in tables 6, 7, and 8, the most advanced selections from seedling groups supplied by the Canal Point Station† were compared at the established test fields. While available space does not permit a discussion of the performance of each seedling, the group as a whole proved distinctly superior to Co. 281 in yield of sugar per acre and in the commercial quality of the cane. While additional tests will be required before a final evaluation can be made of each seedling, results already available indicate that several of them will probably prove valuable commercil varieties.

Fig. 1. Field of C.P. 29/116 on Alice C. Plantation near Franklin showing extensive arrowing. Photographed December 22, 1941.

**TABLE 6. Results of Plant Cane Preliminary Sugarcane Variety Tests on Light Soil in Louisiana During 1941.**

| Variety | Greenwood (Thibodaux) Nov. 11[1] | Godchaux (Raceland) Nov. 13 | Oaklawn (Franklin) Nov. 26 | Albania (Jeanerette) Nov. 20 | Leon J. Landry (New Iberia) Nov. 25 | Roland's Farm (Erath) Nov. 24 | Alma (Lakeland) Nov. 17 | Rosewood (Hamburg) Nov. 19 | Average |
|---|---|---|---|---|---|---|---|---|---|
| **Average Yield of Cane Per Acre (Tons)** | | | | | | | | | |
| Co. 281 | 28.1 | 24.1 | 10.8 | 18.5 | 17.3 | 18.0 | 31.3 | 24.4 | 21.56 |
| C. P. 31/509 | 32.0 | 39.5 | 14.1 | 25.1 | 30.1 | 28.7 | 43.3 | 29.5 | 30.29 |
| C. P. 31/529 | 31.5 | 33.1 | 15.3 | 23.5 | 23.2 | 21.2 | 37.3 | 28.1 | 26.65 |
| C. P. 32/206 | 27.9 | 31.1 | 11.1 | 19.6 | 20.0 | 16.3 | 30.9 | 23.2 | 22.51 |
| C. P. 33/224 | 34.1 | 32.7 | 17.1 | 27.9 | 28.5 | 22.9 | 40.1 | 24.5 | 28.47 |
| C. P. 33/243 | 30.4 | 35.3 | 11.5 | 19.5 | 23.9 | 18.7 | 35.6 | 23.3 | 24.77 |
| C. P. 33/372 | 32.0 | 31.2 | 13.5 | 20.9 | 21.3 | 17.3 | 30.4 | 22.0 | 23.57 |
| C. P. 33/409 | 27.5 | 28.9 | 13.5 | 20.0 | 22.5 | 19.5 | 34.3 | 21.3 | 23.44 |
| C. P. 34/1 | 34.4 | 37.3 | 17.2 | 19.6 | 25.5 | 24.4 | 42.5 | 24.9 | 28.22 |
| C. P. 34/21 | 30.8 | 31.9 | 15.5 | 22.1 | 21.7 | 30.1 | 34.3 | 27.1 | 26.69 |
| C. P. 34/77 | 26.8 | 37.2 | 17.3 | 19.6 | 18.9 | 18.4 | 35.2 | 27.2 | 25.07 |
| C. P. 34/79 | 32.8 | 34.7 | 17.6 | 21.5 | 18.4 | 22.3 | 38.4 | 26.7 | 26.55 |
| C. P. 34/80 | 33.1 | 35.3 | 17.2 | 21.2 | 16.9 | 27.6 | 45.2 | 29.6 | 28.26 |
| C. P. 34/120 | 37.9 | 39.1 | 19.9 | 24.4 | 26.0 | 24.1 | 43.7 | 26.9 | 30.25 |
| Difference | | | | | | | | | |
| For P. = .05 | 5.95 | 5.25 | 3.63 | 4.02 | 4.58 | 5.41 | 6.21 | 5.93 | 2.61 |
| For P. = .01 | 8.04 | 7.10 | 4.92 | 5.43 | 6.23 | 7.38 | 8.40 | 8.02 | 3.46 |
| **Average Indicated Yield of 96° Sugar Per Ton of Cane (Pounds)** | | | | | | | | | |
| Co. 281 | 184.4 | 131.9 | 189.7 | 205.3 | 207.8 | 200.0 | 139.6 | 171.0 | 173.6 |
| C. P. 31/509 | 172.0 | 142.2 | 171.9 | 197.8 | 185.7 | 184.9 | 126.6 | 155.2 | 162.9 |
| C. P. 31/529 | 177.7 | 154.8 | 190.2 | 194.2 | 208.7 | 177.2 | 137.5 | 161.5 | 171.0 |
| C. P. 32/206 | 198.4 | 140.7 | 189.1 | 233.8 | 229.9 | 219.7 | 157.4 | 180.2 | 187.8 |
| C. P. 33/224 | 181.3 | 149.4 | 167.2 | 189.4 | 193.4 | 180.5 | 149.3 | 162.8 | 170.5 |
| C. P. 33/243 | 189.4 | 150.0 | 195.1 | 207.8 | 210.5 | 195.1 | 159.8 | 195.2 | 183.0 |
| C. P. 33/372 | 179.4 | 127.8 | 181.7 | 192.6 | 193.1 | 192.9 | 137.3 | 157.2 | 165.9 |
| C. P. 33/409 | 195.9 | 136.4 | 195.7 | 199.7 | 207.3 | 192.8 | 137.3 | 177.3 | 175.3 |
| C. P. 34/1 | 166.6 | 124.2 | 171.9 | 177.4 | 174.9 | 163.7 | 138.9 | 161.7 | 155.8 |
| C. P. 34/21 | 178.2 | 115.9 | 184.8 | 189.3 | 185.2 | 184.4 | 139.9 | 163.1 | 164.0 |
| C. P. 34/77 | 173.2 | 144.3 | 195.8 | 188.6 | 188.8 | 169.4 | 116.0 | 160.9 | 160.7 |
| C. P. 34/79 | 200.4 | 181.6 | 215.1 | 224.4 | 212.8 | 227.9 | 158.9 | 181.7 | 195.1 |
| C. P. 34/80 | 166.3 | 134.2 | 175.9 | 182.7 | 164.9 | 205.0 | 141.8 | 144.3 | 160.4 |
| C. P. 34/120 | 196.4 | 145.3 | 204.1 | 204.1 | 195.7 | 186.9 | 161.7 | 171.9 | 179.5 |
| Difference | | | | | | | | | |
| For P. = .05 | 12.72 | 18.17 | 22.63 | 17.32 | 13.08 | 11.34 | 15.38 | [2] | 9.52 |
| For P. = .01 | 17.19 | 24.56 | 30.61 | 23.41 | 17.72 | 15.47 | 20.79 | [2] | 12.61 |
| **Average Indicated Yield of 96° Sugar Per Acre (Pounds)** | | | | | | | | | |
| Co. 281 | 5182 | 3179 | 2049 | 3798 | 3595 | 3600 | 4369 | 4172 | 3743 |
| C. P. 31/509 | 5504 | 5617 | 2424 | 4965 | 5590 | 5307 | 5482 | 4578 | 4933 |
| C. P. 31/529 | 5597 | 5124 | 2910 | 4564 | 4842 | 3757 | 5129 | 4538 | 4558 |
| C. P. 32/206 | 5535 | 4376 | 2099 | 4582 | 4598 | 3581 | 4864 | 4181 | 4227 |
| C. P. 33/224 | 6182 | 4885 | 2859 | 5284 | 5512 | 4133 | 5987 | 3989 | 4854 |
| C. P. 33/243 | 5758 | 5295 | 2244 | 4052 | 5031 | 3648 | 5689 | 4548 | 4533 |
| C. P. 33/372 | 5741 | 3987 | 2453 | 4025 | 4113 | 3337 | 4174 | 3458 | 3911 |
| C. P. 33/409 | 5387 | 3942 | 2642 | 3994 | 4664 | 3760 | 4709 | 3776 | 4109 |
| C. P. 34/1 | 5731 | 4633 | 2957 | 3477 | 4460 | 3994 | 5903 | 4026 | 4398 |
| C. P. 34/21 | 5489 | 3697 | 2864 | 4183 | 4019 | 5550 | 4799 | 4420 | 4378 |
| C. P. 34/77 | 4642 | 5368 | 3387 | 3697 | 3568 | 3117 | 4083 | 4376 | 4030 |
| C. P. 34/79 | 6573 | 6301 | 3786 | 4825 | 3915 | 5082 | 6102 | 4851 | 5179 |
| C. P. 34/80 | 5504 | 4737 | 3025 | 3873 | 2787 | 5658 | 6409 | 4271 | 4533 |
| C. P. 34/120 | 7444 | 5681 | 4062 | 4980 | 5088 | 4504 | 7066 | 4624 | 5431 |
| Difference | | | | | | | | | |
| For P. = .05 | 553 | 528 | 456 | 492 | 481 | 520 | 548 | [2] | 375 |
| For P. = .01 | 747 | 714 | 618 | 664 | 652 | 710 | 741 | [2] | 497 |

[2] Date of harvest.
[2] Samples composited for complete milling test.

C.P. 33/243, released for commercial culture during the fall of 1941, proved significantly superior to Co. 281 in yield of sugar per ton of cane as indicated by average differences ranging from 9.4 pounds in plant-cane to 12.7 pounds in first stubble tests. It was likewise superior to Co. 281 as to indicated yield of sugar per acre in each of plant-cane, first and second stubble tests, but it should be noted that its superiority to Co. 281 in this respect was not as great as that maintained by C.P. 28/19 in similar tests (tables 1, 2, 3). C.P. 33/243 displayed relatively poor stubbling qualities especially under unfavorable growing conditions, and plantings of this variety should be confined to the more fertile and better drained light soils.

In the average of 8 plant-cane tests (table 6) C.P. 34/120 outyielded Co. 281 by an average difference of 1688 pounds of sugar per acre and 5.9 pounds of sugar per ton of cane. In more limited tests of first and second stubble conducted at the Houma Station (data not shown in this report) C.P. 34/120 surpassed Co. 281 in both respects by even greater margins. The variety must therefore be ranked as one of the most valuable ones now under observation and seed supplies should be extended as rapidly as possible.

Next in point of interest at this time are results obtained in tests of C.P. 29/137 and C.P. 32/206 both of which have demonstrated satisfactory windrowing qualities in tests conducted by Lauritzen (5).

In the average of all tests during 1941 each of these varieties proved distinctly superior to Co. 281 in yields of sugar per ton of cane and per acre. In the case of C.P. 32/206 the advantage over Co. 281 in individual series of tests ranged from 484 to 1321 pounds of sugar per acre and from 11.1 to 19.0 pounds of sugar per ton of cane. A nearly comparable superiority over Co. 281 was maintained by C.P. 29/137 in first and second stubble tests.

In plant-cane tests (table 6) C.P. 34/79 gave the highest indicated yield of sugar per ton of cane and was second only to C.P. 34/120 in yield of sugar per acre. However, first stubble yields of C.P. 34/79 (table 7) were extremely disappointing. The value of this variety is further impaired by its extreme susceptibility to chlorotic streak (1).

Among other varieties in this group showing considerable promise may be mentioned C.P. 31/509, C.P. 33/372, C.P. 31/529 and C.P. 33/409.

## Tests on muck soil

In tests on muck soils, results of which are summarized in table 9, C.P. 28/19 proved, on the whole, the most satisfactory variety in point of sugar content and significantly exceeded its most important present competitor C.P. 29/320 in sugar per acre. C.P. 34/79, C.P. 33/243 and C.P. 33/253 were superior to C.P. 28/19 in yield of sugar per acre but were definitely under the latter in indicated yield of sugar per ton of cane. Additional tests will have to be made before

**TABLE 7. Results of First Stubble Preliminary Sugarcane Variety Tests in Louisiana During 1941.**

| Variety | Greenwood (Thibodaux) Nov. 10 (a) | Godchaux (Raceland) Nov. 12 | Oaklawn (Franklin) Nov. 4 | Albania (Jeanerette) Nov. 5 | Leon J. Landry (New Iberia) Nov. 7 | Roland's Farm (Erath) Nov. 6 | Alma (Lakeland) Oct. 27 | Rosewood (Hamburg) Oct. 31 | Average |
|---|---|---|---|---|---|---|---|---|---|
| Average Yield of Cane Per Acre (Tons) | | | | | | | | | |
| Co. 281 | 7.3 | 17.3 | 8.5 | 12.7 | 7.5 | 9.7 | 12.7 | 3.0 | 9.84 |
| C. P. 29/137 | 16.7 | 16.3 | 13.6 | 18.7 | 17.5 | 11.5 | 17.5 | 12.5 | 15.54 |
| C. P. 31/509 | 27.1 | 31.6 | 19.1 | 22.1 | 20.7 | 20.8 | 25.6 | 15.3 | 22.79 |
| C. P. 32/206 | 14.7 | 22.8 | 16.4 | 8.5 | 12.1 | 11.2 | 24.9 | 12.7 | 15.41 |
| C. P. 32/324 | 7.1 | 23.3 | 13.5 | 10.9 | 11.3 | 9.6 | 10.9 | 2.4 | 11.12 |
| C. P. 33/233 | 15.5 | 20.5 | 10.0 | 15.7 | 10 7 | 14.5 | 28.0 | 15.9 | 16.35 |
| C. P. 33/243 | 10.4 | 19.9 | 13.2 | 17.3 | 9.3 | 10.5 | 13.5 | 9.2 | 12.91 |
| C. P. 33/253 | 12.4 | 22.3 | 21.3 | 16.8 | 16.8 | 18.4 | 27.5 | 13.2 | 18.59 |
| C. P. 33/372 | 24.4 | 27.5 | 23.3 | 22.1 | 18.8 | 18.3 | 22.7 | 15.5 | 21.57 |
| C. P. 33/409 | 23.5 | 22.9 | 21.3 | 18.4 | 13.2 | 14.9 | 24.7 | 14.1 | 19.12 |
| C. P. 34/79 | 5.3 | 14.5 | 13.1 | 4.8 | 11.5 | 9 7 | 11.5 | 7.7 | 9.76 |
| Difference | | | | | | | | | |
| For P. = .05 | 5.76 | 5.00 | 5.49 | 3 62 | 2.89 | 5.01 | 7.36 | 3.05 | 3.26 |
| For P. = .01 | 7.83 | 6.80 | 7.48 | 4.94 | 3.92 | 6.82 | 10.00 | 4.15 | 4.33 |
| Average Indicated Yield of 96° Sugar Per Ton of Cane (Pounds) | | | | | | | | | |
| Co. 281 | 170.3 | 187.4 | 181.1 | 202.8 | 230.2 | 202.4 | 139.8 | 149.3 | 184.4 |
| C. P. 29/137 | 192.9 | 181.8 | 198.3 | 219.4 | 229.3 | 194.6 | 182.4 | 187.2 | 199.2 |
| C. P. 31/509 | 175.9 | 191.2 | 177.0 | 196.3 | 216.4 | 178.3 | 132.1 | 162.9 | 178.7 |
| C. P. 32/206 | 210.6 | 211.3 | 209.0 | 225.5 | 224.5 | 218.0 | 175.2 | 181.3 | 203.4 |
| C. P. 32/324 | 198.1 | 179.4 | 192.2 | 205.2 | 219.9 | 192.4 | 161.8 | 160.1 | 189.9 |
| C. P. 33/233 | 164.7 | 172.9 | 174.3 | 186.1 | 196.8 | 189.1 | 102.4 | 152.1 | 159.7 |
| C. P. 33/243 | 175.3 | 200.5 | 199.0 | 208.2 | 221.0 | 196.1 | 179.5 | 193.4 | 197.1 |
| C. P. 33/253 | 200.6 | 208.4 | 220.2 | 227.8 | 233.4 | 204.9 | 169.0 | 189.0 | 205.0 |
| C. P. 33/372 | 192.2 | 198.3 | 196.3 | 211.8 | 216.4 | 194.6 | 148.6 | 167.7 | 191.2 |
| C. P. 33/409 | 190.1 | 188.1 | 194.9 | 206.0 | 232.2 | 204.4 | 167.3 | 185.2 | 193.3 |
| C. P. 34/79 | 189.2 | 199.6 | 189.9 | 210.8 | 220.7 | 216.6 | 163.5 | 181.9 | 196.2 |
| Difference | | | | | | | | | |
| For P. = .05 | 15.55 | 12.99 | 13.24 | 18.94 | 8.41 | 12.11 | 21.54 | 17.38 | 9.31 |
| For P. = .01 | 21.14 | 17.66 | 18.05 | 25.83 | 11.43 | 16.47 | 29.28 | 23.62 | 12.36 |
| Average Indicated Yield of 96° Sugar Per Acre (Pounds) | | | | | | | | | |
| Co. 281 | 1243 | 3242 | 1539 | 2576 | 1726 | 1963 | 1775 | 448 | 1814 |
| C. P. 29/137 | 3221 | 2963 | 2697 | 4103 | 4013 | 2238 | 3192 | 2340 | 3096 |
| C. P. 31/509 | 4767 | 6042 | 3381 | 4338 | 4479 | 3709 | 3382 | 2492 | 4074 |
| C. P. 32/206 | 3096 | 4818 | 3428 | 1917 | 2716 | 2442 | 4362 | 2302 | 3135 |
| C. P. 32/324 | 1406 | 4180 | 2595 | 2237 | 2485 | 1847 | 1764 | 384 | 2112 |
| C. P. 33/233 | 2553 | 3544 | 1743 | 2922 | 2106 | 2742 | 2867 | 2418 | 2612 |
| C. P. 33/243 | 1823 | 3990 | 2627 | 3602 | 2055 | 2059 | 2423 | 1779 | 2545 |
| C. P. 33/253 | 2487 | 4647 | 4690 | 3827 | 3921 | 3770 | 4647 | 2495 | 3811 |
| C. P. 33/372 | 4690 | 5453 | 4574 | 4681 | 4068 | 3561 | 3373 | 2599 | 4125 |
| C. P. 33/409 | 4467 | 4307 | 4151 | 3790 | 3065 | 3046 | 4132 | 2611 | 3696 |
| C. P. 34/79 | 1003 | 2894 | 2488 | 1012 | 2538 | 2101 | 1880 | 1401 | 1914 |
| Difference | | | | | | | | | |
| For P. = .05 | 517 | 507 | 515 | 470 | 395 | 489 | 568 | 382 | 392 |
| For P. = .01 | 703 | 689 | 702 | 641 | 537 | 664 | 773 | 520 | 521 |

(a) Date of harvest.

**TABLE 8. Results of Second Stubble Preliminary Sugarcane Variety Tests on Light Soil in Louisiana During 1941.**

| Variety | Greenwood (Thibodaux) Oct. 20 (a) | Godchaux (Raceland) Oct. 22 | Alma (Lakeland) Oct. 27 | Rosewood (Hamburg) Oct. 30 | Average |
|---|---|---|---|---|---|
| Average Yield of Cane Per Acre (Tons) | | | | | |
| Co. 181 | 18.4 | 11.3 | 16.7 | 17.9 | 16.07 |
| C. P. 29/137 | 24.7 | 20.1 | 11.5 | 20.4 | 19.17 |
| C. P. 31/509 | 30.7 | 26.1 | 23.6 | 26.5 | 26.72 |
| C. P. 32/134 | 15.3 | 10.0 | 14.1 | 14.5 | 13.47 |
| C. P. 32/202 | 23.9 | 20.5 | 20.4 | 26.7 | 22.87 |
| C. P. 32/206 | 23.7 | 18.0 | 21.5 | 22.4 | 21.40 |
| C. P. 32/324 | 23.6 | 16.4 | 7.5 | 18.8 | 16.57 |
| C. P. 33/224 | 14.9 | 9.7 | 4.8 | 6.9 | 9.07 |
| C. P. 33/243 | 19.3 | 17.9 | 17.3 | 18.0 | 18.12 |
| C. P. 33/253 | 24.1 | 21.2 | 28.3 | 26.3 | 24.97 |
| Difference | | | | | |
| For P. = .05 | 4.93 | 4.67 | 7.36 | 5.73 | 4.44 |
| For P. = .01 | 6.75 | 6.40 | 10.08 | 7.85 | 6.00 |
| Average Indicated Yield of 96° Sugar Per Ton of Cane (Pounds) | | | | | |
| Co. 281 | 130.0 | 145.0 | 150.1 | 168.7 | 148.7 |
| C. P. 29/137 | 165.2 | 159.3 | 160.4 | 179.2 | 166.7 |
| C. P. 31/509 | 143.1 | 141.3 | 136.0 | 148.2 | 142.4 |
| C. P. 32/134 | 114.6 | 116.4 | 130.2 | 131.2 | 123.5 |
| C. P. 32/202 | 108.1 | 127.9 | 106.8 | 123.8 | 116.8 |
| C. P. 32/206 | 158.0 | 155.2 | 150.3 | 170.6 | 158.8 |
| C. P. 32/324 | 150.5 | 151.0 | 156.1 | 157.1 | 153.2 |
| C. P. 33/224 | 149.0 | 159.7 | 166.4 | 181.3 | 160.4 |
| C. P. 33/243 | 146.0 | 146.3 | 177.7 | 172.3 | 160.2 |
| C. P. 33/253 | 154.3 | 176.3 | 158.1 | 173.5 | 165.1 |
| Difference | | | | | |
| For P. = .05 | 11.33 | 16.97 | 22.69 | 17.73 | 12.03 |
| For P. = .01 | 15.53 | 22.50 | 31.08 | 24.29 | 16.25 |
| Average Indicated Yield of 96° Sugar Per Acre (Pounds) | | | | | |
| Co. 281 | 2392 | 1638 | 2507 | 3020 | 2389 |
| C. P. 29/137 | 4080 | 3202 | 1845 | 3656 | 3196 |
| C. P. 31/509 | 4393 | 3688 | 3210 | 3927 | 3804 |
| C. P. 32/134 | 1753 | 1164 | 1836 | 1902 | 1664 |
| C. P. 32/202 | 2584 | 2622 | 2179 | 3305 | 2672 |
| C. P. 32/206 | 3745 | 2794 | 3231 | 3821 | 3398 |
| C. P. 32/324 | 3552 | 2476 | 1171 | 2653 | 2538 |
| C. P. 33/224 | 2220 | 1549 | 799 | 1251 | 1455 |
| C. P. 33/243 | 2818 | 2619 | 3074 | 3101 | 2903 |
| C. P. 33/253 | 3719 | 3738 | 4474 | 4563 | 4123 |
| Difference | | | | | |
| For P. = .05 | 446 | 456 | 557 | 517 | 428 |
| For P. = .01 | 611 | 626 | 762 | 708 | 578 |

(a) Date of harvest.

the suitability of these varieties for culture on muck soils can be determined.

## Summary and conclusions

Evidence of the greatly lowered levels of productivity displayed by Co. 290 and C.P. 29/320 in tests during 1941 is considered especially significant. The most serious recessions in their yields were observed in first stubble tests, but yields obtained with the two varieties from plant-cane and second stubble fell below standards maintained in previous years as compared with the other varieties.

As previously stated in this report, there is evidence that the extremely poor results obtained with stubble cane generally during 1941 and especially in the first stubble crop of certain varieties were closely associated with unfavorable effects of the unprecedented freeze of November 15, 1940. For this reason, results obtained during 1941 cannot be regarded as entirely representative.

In reports previously published (3, 4), there has been presented evidence indicating that relative yields of some of our presently cultivated varieties, notably C.P. 28/19, Co. 290, and C.P. 29/320 have been declining from year to year, and the unfavorable results obtained with the latter two varieties during 1941 may be due, in part at least, to factors entirely unrelated to preceding unusual winter conditions. Therefore, regardless of our interpretation of the varietal yield situation as observed during 1941, we must recognize that C.P. 29/320 and Co. 290 have apparently dropped to levels of productivity much below the standard of their respective past performances. It can likewise be shown that relative yields of C.P. 28/19 have maintained a significant straight-

line recession during the past 5 years. It should be pointed out, however, that changes in relative yield capacity observed, even with Co. 290 and C.P. 29/320, have not assumed the proportions of varietal failures. Co. 290 must be still regarded as an important variety especially in the Bayou Teche area, but it would seem advisable to give serious thought to the question of appropriate varietal diversification on plantations where this variety is now being grown to the practical exclusion of all others. Fortunately, varieties which may be satisfactorily substituted for the ones showing the most serious declines in relative yield are now available. On the principal light soil areas of the Teche and prairie parishes Co. 290 may be advantageously replaced, in part, by C.P. 29/116. Consideration should also be given to the utilization of C.P. 29/103 on the more fertile phases of light soils of these parishes. However, the latter's susceptibility to chlorotic streak (1) is unquestionably a serious disadvantage.

In view of results obtained in tests during the past three years, the variety C.P. 29/116 should largely replace Co. 290 on Sharkey clay or similar heavy clay soils. In general C.P. 29/116 has produced cane of entirely acceptable commercial quality on such areas but in situations where the latter will not mature satisfactorily the cultivation of C.P. 29/103 or C.P. 29/120 could be considered as a possible alternative.

Yields published in this report were obtained under conditions of either very light chlorotic streak infection or in the complete absence of the disease. The extreme susceptibility of C.P. 29/320 to chlorotic streak must therefore be regarded as an additional disadvantage to utilization of this variety. Therefore the advisability of a widespread replacement of C.P. 29/320 by C.P. 28/19 for early milling purposes seems clearly indicated.

C.P. 33/243 gave yields of sugar per acre, on the whole, lower than obtained from C.P. 28/19 and proved a relatively weak stubbler. Its cultivation should be limited to the better drained and more fertile phases of light soils.

C.P. 34/120 has shown the most promise among 19 unreleased varieties included in extensive plantation tests. Because of its high yield of sugar per acre, its relatively high yield of sugar per ton of cane and exceedingly good stubbling qualities this variety will probably prove widely adaptable and seed supplies should be extended as rapidly as possible.

C.P. 32/206, a variety considered suitable for windrowing purposes, surpassed Co. 281 in yields of sugar per ton of cane and per acre. The relatively low percentage of mosaic now to be found in the former is considered an important additional advantage. Very satisfactory yields were obtained from C.P. 29/137, also considered suitable for windrowing purposes but the variety's susceptibility to chlorotic streak (1)(6) greatly detracts from its value for commercial culture. Among other unreleased varieties showing promise in plantation tests were C.P. 31/509, C.P. 31/529, C.P. 33/372 and C.P. 33/409.

C.P. 28/19 again proved the most satisfactory variety among those extensively tested for culture on muck soils. In limited tests the more recently introduced varieties C.P. 33/243, C.P. 33/253 and C.P. 34/79 gave relatively high yields of sugar per acre but proved inferior to C.P. 28/19 in indicated yield of sugar per ton of cane.

## Literature Cited

(1) Abbott, E. V. Unpublished results of sugarcane disease studies in Louisiana.

(2) Arceneaux, G., Hebert, L. P., and Krumbhaar, C. C. 1941. Results of variety tests in Louisiana during 1940. Sugar Bull. 19 (No. 18, June 15), pp. 94-100.

(3) _____, 1940. An analysis of results of sugarcane variety tests in Louisiana during recent years. The Sugar Journal 3 (No. 6), pp. 11-12.

(4) _____ Gibbens, R. T. Jr., and Krumbhaar, C. C. 1939. Variety tests of sugarcane in Louisiana during the crop year 1936-37 and summary of annual results, 1935-37. U. S. Dept. Agr. Circ. 531, 27 pp. illus.

(5) Lauritzen, J. I. Unpublished results of deterioration studies at U. S. Sugar Plant Field Station, Houma, Louisiana.

(6) Summers, E. M., Rands, R. D. and Abbott, E. V. 1938. Disease resistance tests. Sugar Bull. 17 (No. 1, Oct 1), pp. 30-32.

[1]The authors are indebted to L. G. Davidson, Assistant Chemist, Division of Sugar Plant Investigations, Bureau of Plant Industry, U. S. Department of Agriculture, for making chemical analyses.

[2]The soils of the Louisiana sugarcane district may be divided into 3 main groups as regards their agricultural utilization: (1) Comparatively light and well drained soils characterized by the very fine sandy phase of the Yazoo series and comprising by far the greater part of the agricultural area of the district. (2) Heavy clays, usually poorly drained, of which Sharkey Heavy Clay soil is typical. (3) Reclaimed muck soils.

*Released for commercial culture in October, 1939.

†United States Sugar Plant Field Station, Canal Point, Florida.

**TABLE 9. Results of Sugarcane Variety Tests on Muck Soil at Clovelly Farms During 1941.**

| Variety | Plant Cane | | | First Stubble | | | Second Stubble | | |
|---|---|---|---|---|---|---|---|---|---|
| | Cane per acre | Sugar per ton | Sugar per acre | Cane per acre | Sugar per ton | Sugar per acre | Cane per acre | Sugar per ton | Sugar per acre |
| | Tons | Pounds | Pounds | Tons | Pounds | Pounds | Tons | Pounds | Pounds |
| Co. 281 | 25.3 | 162.3 | 4106.2 | 25.6 | 133.7 | 3422.7 | 22.4 | 125.5 | 2811 |
| C. P. 28/11 | ---- | ---- | ---- | ---- | ---- | ---- | 27.3 | 160.9 | 4393 |
| C. P. 28/19 | 23.2 | 218.9 | 5078.0 | 23.1 | 186.4 | 4306.0 | 23.9 | 160.1 | 3826 |
| C. P. 29/320 | 27.4 | 155.5 | 4261.0 | 24.3 | 162.9 | 3958.0 | 23.0 | 164.2 | 3777 |
| C. P. 33/243 | 34.2 | 152.6 | 5219.0 | 39.5 | 139.1 | 5494.0 | ---- | ---- | ---- |
| C. P. 33/253 | 29.5 | 166.8 | 4921.0 | 35.2 | 148.9 | 5241.0 | 32.8 | 151.1 | 4956 |
| C. P. 34/79 | 38.2 | 171.5 | 6551.0 | ---- | ---- | ---- | ---- | ---- | ---- |
| Difference | | | | | | | | | |
| For P. = .05 | 3.185 | 11.062 | 453 | 3.724 | 13.373 | 459 | 3.406 | 9.123 | 405 |
| For P. = .01 | 4.344 | 15.087 | 617 | 5.221 | 18.749 | 644 | 4.775 | 12.791 | 568 |

## CROPLAND—PROPORTIONATE SHARE—PLANTED ACRES OF LOUISIANA SUGARCANE FARMS PARTICIPATING IN THE SUGAR PROGRAM (SUGAR ACT OF 1937) BY PARISHES, FROM A. A. A. REPORTS

| PARISHES | Cropland (Acres) | | | Proportionate Shares (Acres) | | | Total Planted (Acres) | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1938 | 1939 | 1940 | 1938 | 1939 | 1940 | 1938 | 1939 | 1940 |
| Acadia | 255.4 | ------- | ------- | 19.3 | ------- | ------- | 4.3 | ------- | ------- |
| Ascension | 32,408.9 | 34,729.6 | 34,688.2 | 12,767.2 | 11,782.7 | 11,547.3 | 9,730.8 | 10,147.8 | 10,834.8 |
| Assumption | 45,460.0 | 47,213.6 | 46,413.0 | 23,893.9 | 22,788.4 | 17,557.5 | 23,802.6 | 23,837.4 | 22,482.6 |
| Avoyelles | 21,969.0 | 17,196.2 | 15,099.8 | 6,757.2 | 3,148.7 | 3,692.0 | 4,277.7 | 2,780.7 | 3,298.8 |
| E. Baton Rouge | 4,692.8 | 3,861.9 | 2,913.6 | 1,486.3 | 804.1 | 588.6 | 751.1 | 624.6 | 393.3 |
| Evangeline | 942.3 | 786.5 | 95.7 | 76.6 | 65.0 | 25.0 | 40.6 | 29.5 | 11.9 |
| Iberia | 84,616.2 | 84,587.3 | 84,663.9 | 35,908.0 | 29,606.7 | 30,277.7 | 35,429.4 | 31,116.9 | 31,148.2 |
| Iberville | 53,053.8 | 53,439.6 | 50,724.2 | 25,531.3 | 21,310.1 | 20,428.4 | 23,606.7 | 21,439.6 | 21,174.2 |
| Jefferson | ------- | 461.8 | 182.7 | ------- | 125.5 | 54.0 | ------- | 102.7 | 38.6 |
| Lafayette | 63,305.8 | 62,228.9 | 52,236.5 | 21,927.1 | 16,701.9 | 13,693.9 | 15,074.7 | 13,521.0 | 11,559.0 |
| Lafourche | 55,172.0 | 52,527.1 | 52,912.4 | 24,328.7 | 18,848.5 | 19,199.7 | 22,995.5 | 18,662.0 | 19,634.3 |
| Plaquemine | 532.2 | 239.0 | ------- | 209.3 | 82.8 | ------- | 157.0 | 86.1 | ------- |
| Pointe Coupee | 53,638.1 | 54,642.7 | 53,288.2 | 18,342.7 | 16,149.2 | 15,479.8 | 14,122.2 | 12,948.9 | 12,179.5 |
| Rapides | 16,574.4 | 19,936.3 | 16,643.6 | 4,692.4 | 2,903.0 | 2,564.2 | 2,492.6 | 2,507.5 | 2,225.3 |
| St. Bernard | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- |
| St. Charles | 7,540.6 | 7,084.0 | 6,039.1 | 3,564.4 | 2,876.9 | 2,328.0 | 3,141.8 | 2,557.9 | 2,023.0 |
| St. James | 32,879.2 | 33,293.0 | 32,467.1 | 13,786.4 | 11,578.7 | 11,595.7 | 13,315.8 | 11,398.1 | 11,542.6 |
| St. John | 29,192.4 | 28,090.0 | 28,036.5 | 14,596.3 | 12,405.2 | 11,744.0 | 14,254.3 | 12,520.6 | 13,138.8 |
| St. Landry | 20,218.0 | 20,137.0 | 18,536.5 | 3,183.5 | 2,884.8 | 2,914.3 | 2,521.7 | 2,218.5 | 2,258.4 |
| St. Martin | 63,524.6 | 64,619.1 | 68,732.2 | 23,514.3 | 21,784.9 | 20,375.8 | 17,655.6 | 17,497.9 | 15,310.4 |
| St. Mary | 58,140.9 | 57,756.8 | 57,029.2 | 28,766.3 | 24,473.9 | 22,486.9 | 28,217.8 | 26,541.0 | 25,918.1 |
| Terrebonne | 66,808.4 | 67,023.2 | 65,268.3 | 34,222.4 | 27,922.0 | 29,287.0 | 33,570.0 | 28,013.2 | 31,364.9 |
| Vermilion | 62,363.6 | 67,469.7 | 63,225.5 | 17,693.4 | 13,575.9 | 12,820.5 | 12,231.0 | 11,320.2 | 10,480.5 |
| W. Baton Rouge | 31,918.3 | 32,690.3 | 31,723.3 | 17,628.8 | 14,409.0 | 13,159.2 | 16,044.7 | 14,166.3 | 14,468.1 |
| W. Feliciana | 11,653.6 | 9,775.6 | 9,775.6 | 3,617.5 | 2,713.1 | 3,282.8 | 3,787.9 | 3,578.3 | 3,631.3 |
| TOTAL | 816,860.1 | 819,789.2 | 790,695.1 | 336,513.3 | 278,941.0 | 265,102.3 | 317,225.8 | 267,616.7 | 265,116.6 |

## PROPORTIONATE SHARES ACRES HARVESTED FOR SUGAR—YIELD OF SUGARCANE PER ACRE AND YIELD OF RECOVERABLE SUGAR PER ACRE OF LOUISIANA FARMERS PARTICIPATING IN THE SUGAR PROGRAM (SUGAR ACT OF 1937) BY PARISHES FROM A. A. A. REPORTS

| PARISHES | Proportionate Shares Harvested for Sugar (acres) | | | Yield of Cane per Acre Tons | | | Yield of Recoverable Sugar per Acre—CWT | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1938 | 1939 | 1940 | 1938 | 1939 | 1940 | 1938 | 1939 | 1940 |
| Acadia | 4.3 | ------- | ------- | 14.84 | ------- | ------- | 22.21 | ------- | ------- |
| Ascension | 8,952.6 | 9,116.7 | 8,256.1 | 20.20 | 19.58 | 12.48 | 32.52 | 31.99 | 19.78 |
| Assumption | 21,583.5 | 19,856.7 | 14,388.2 | 24.35 | 24.92 | 17.13 | 40.74 | 42.69 | 28.50 |
| Avoyelles | 3,949.8 | 2,325.3 | 2,347.8 | 18.79 | 22.93 | 15.91 | 31.54 | 38.25 | 23.91 |
| E. Baton Rouge | 712.0 | 564.3 | 339.6 | 17.94 | 18.36 | 12.15 | 28.64 | 30.48 | 20.18 |
| Evangeline | 38.6 | 26.5 | 10.4 | 13.65 | 16.03 | 6.29 | 22.76 | 28.35 | 10.15 |
| Iberia | 31,635.7 | 25,748.1 | 23,982.3 | 19.72 | 22.06 | 13.21 | 34.18 | 37.15 | 21.55 |
| Iberville | 21,698.4 | 19,073.2 | 15,521.6 | 23.17 | 22.93 | 14.96 | 37.48 | 39.22 | 24.92 |
| Jefferson | ------- | 93.8 | 34.0 | ----- | 7.85 | 8.64 | ----- | 14.18 | 13.58 |
| Lafayette | 13,535.8 | 12,399.1 | 8,427.5 | 15.90 | 16.79 | 10.54 | 27.15 | 28.06 | 18.24 |
| Lafourche | 21,196.9 | 17,292.5 | 16,064.0 | 24.91 | 23.38 | 15.49 | 41.86 | 39.97 | 25.29 |
| Plaquemine | 149.8 | 68.3 | ------- | 11.51 | 7.02 | ----- | 20.75 | 13.02 | ----- |
| Pointe Coupee | 13,026.0 | 11,760.2 | 9,626.1 | 20.48 | 20.54 | 13.43 | 32.34 | 34.60 | 21.63 |
| Rapides | 2,307.1 | 2,320.0 | 1,646.8 | 20.04 | 21.15 | 16.98 | 33.22 | 35.13 | 26.76 |
| St. Bernard | ------- | ------- | ------- | ----- | ----- | ----- | ----- | ----- | ----- |
| St. Charles | 3,004.2 | 2,343.9 | 1,613.1 | 17.64 | 15.67 | 11.85 | 28.60 | 26.48 | 18.88 |
| St. James | 12,125.2 | 10,302.5 | 9,777.7 | 21.23 | 21.25 | 12.61 | 35.10 | 36.49 | 20.54 |
| St. John | 13,168.1 | 10,984.1 | 9,734.3 | 23.29 | 22.73 | 13.98 | 39.72 | 40.66 | 23.15 |
| St. Landry | 2,155.7 | 1,984.9 | 1,372.7 | 20.84 | 19.21 | 12.18 | 32.62 | 31.41 | 19.38 |
| St. Martin | 15,848.6 | 15,658.1 | 11,899.5 | 19.99 | 18.29 | 13.02 | 33.27 | 29.99 | 21.33 |
| St. Mary | 26,062.9 | 22,178.7 | 18,536.7 | 22.46 | 18.97 | 14.89 | 38.92 | 39.25 | 23.81 |
| Terrebonne | 31,290.1 | 24,914.3 | 23,895.0 | 21.73 | 21.36 | 14.17 | 37.85 | 36.47 | 22.55 |
| Vermilion | 10,969.6 | 9,998.3 | 7,028.5 | 20.17 | 20.97 | 10.00 | 32.05 | 33.69 | 16.29 |
| West Baton Rouge | 14,867.4 | 12,685.8 | 10,487.8 | 21.54 | 20.96 | 14.11 | 34.87 | 36.07 | 23.39 |
| West Feliciana | 3,514.7 | 2,622.2 | 2,557.0 | 29.46 | 26.59 | 16.23 | 44.57 | 45.71 | 24.81 |
| TOTAL | 271,797.0 | 234,317.5 | 197,546.7 | 21.59 | 21.23 | 13.97 | 36.17 | 36.66 | 22.74 |

## RECAPITULATION OF FINAL MANUFACTURING REPORTS OF LOUISIANA SUGAR MILLS (CROPS 1934-1941) A. A. A. Records

| | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 |
|---|---|---|---|---|---|---|---|---|
| Crop Days | 58.0 | 68.6 | 80.0 | 80.06 | 73.30 | 63.82 | 39.85 | 52.35 |
| Time lost % of total time | 16.49 | 15.89 | 18.61 | 20.81 | 13.43 | 13.00 | 15.91 | 19.63 |
| Cane C Tons Ground | 3,163,901 | 4,182,715 | 4,941,235 | 5,240,675 | 5,858,871 | 5,083,657 | 2,923,204 | 3,946,699 |
| % of Total Cane Ground | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Tons Ground per Hour | 38.83 | 42.17 | 51.98 | 50.75 | 53.38 | 56.10 | 54A25 | 55.83 |
| Extraction N. J. % Cane | 72.64 | 72.63 | 75.51 | 74.69 | 75.61 | 75.66 | 75.16 | 75.39 |
| Sucrose Extraction | 90.37 | 90.71 | 91.26 | 91.32 | 91.44 | 91.74 | 91.30 | 91.74 |
| Saturation % Cane | 18.26 | 16.39 | 14.77 | 14.479 | 16.10 | 15.78 | 15.00 | 15.66 |
| Fibre % Cane | 14.92 | 13.92 | 13.22 | 12.36 | 13.66 | 13.57 | 13.06 | 13.38 |
| Java Ratio | 75.39 | 77.54 | 78.63 | 77.51 | 78.71 | 78.23 | 78.19 | 78.14 |
| Analyses | | | | | | | | |
| Crusher Juice Brix | 16.04 | 16.42 | 16.11 | 15.86 | 16.59 | 16.75 | 15.81 | 16.27 |
| Brix Factor (Final Report) | 97.05 | 97.08 | 92.27 | 97.47 | 97.35 | 97.25 | 97.22 | 97.30 |
| Sucrose Factor (Final Report) | 93.62 | 94.50 | 94.87 | 94.91 | 95.20 | 94.89 | 94.98 | 95.07 |
| Normal Juice Brix | 15.58 | 15.94 | 15.67 | 15.42 | 16.15 | 16.29 | 15.37 | 15.83 |
| Normal Juice Sucrose | 12.22 | 12.46 | 11.84 | 11.76 | 12.50 | 12.63 | 11.93 | 12.14 |
| Normal Juice Purity | 78.36 | 78.17 | 75.56 | 76.26 | 77.40 | 75.53 | 77.62 | 76.69 |
| Factory Sirup Brix | 57.06 | 57.56 | 59.23 | 58.33 | 58.88 | 59.24 | 58.52 | 58.68 |
| Bagasse:—%Sucrose | 3.17 | 3.07 | 3.09 | 2.92 | 3.06 | 3.04 | 3.07 | 2.93 |
| Bagasse:—%Moisutre | 48.53 | 47.95 | 47.97 | 48.38 | 47.69 | 47.69 | 48.94 | 48.64 |
| Bagasse:—% Fiber | 47.35 | 47.69 | 47.86 | 47.53 | 47.44 | 47.88 | 46.95 | 47.56 |
| Press Cake, Sucrose | 5.12 | 5.47 | 5.25 | 5.08 | 4.76 | 4.45 | 3.93 | 3.78 |
| Residual Juice Brix | | 6.57 | 6.20 | 6.29 | 6.13 | 6.22 | 5.84 | 5.88 |
| Sucrose Balance | | | | | | | | |
| Sucrose in Molasses % Cane | 0.920 | 0.864 | 0.930 | 1.004 | 1.022 | 0.964 | 0.969 | 0.961 |
| Sucrose in Press Cake % Cane | 0.090 | 0.082 | 0.096 | 0.111 | 0.097 | 0.082 | 0.082 | 0.078 |
| Sucrose in Undetermined % Cane | 0.150 | 0.135 | 0.201 | 0.201 | 0.220 | 0.179 | 0.141 | 0.183 |
| Sucrose in Bagasse % Cane | 0.950 | 0.944 | 0.858 | 0.848 | 0.994 | 0.860 | 0.854 | 0.824 |
| Sucrose Total Losses % Cane | 2.110 | 2.025 | 2.085 | 2.224 | 2.225 | 2.085 | 2.046 | 2.046 |
| Sucrose Sugars % Cane | 7.750 | 8.121 | 7.729 | 7.412 | 8.110 | 8.328 | 7.775 | 7.933 |
| Total Sucrose % Cane | 9.860 | 10.146 | 9.814 | 9.635 | 10.335 | 10.413 | 9.821 | 9.979 |
| Average Rolls per Tandem | ----- | 8.82 | 9.13 | 10.78 | 10.01 | 10.12 | 10.24 | 10.51 |
| Average Crushers per Tandem | ----- | 0.89 | 1.03 | 0.88 | 0.92 | 0.92 | 0.94 | 0.97 |
| Average Knives per Tandem | ----- | 0.89 | 0.90 | 0.99 | 0.95 | 0.92 | 0.96 | 1.04 |
| Lbs. 96- Sugar M&E T/C | 153.22 | 168.66 | 160.993 | 154.391 | 168.96 | 173.68 | 161.98 | 165.28 |
| Gals. Final Molasses M&E T/C | 5.6 | 5.94 | 6.520 | 6.57 | 6.48 | 6.64 | 6.28 | 6.69 |
| Boiling House Efficiency | 98.56 | 99.77 | 99.290 | 95.281 | 97.16 | 98.68 | 98.00 | 98.69 |
| Gals. Oil and Oil Equivalent T/C | 4.70 | 3.83 | 5.940 | ----- | ----- | ----- | ----- | ----- |

# Sugar Milling Results Audubon Sugar Factory Season 1941

(*T. Ben Arnold with Arthur G. Keller*)

This progress report deals with certain phases of the 1941 program of the Audubon Sugar Factory, which, it is felt, will be of interest and possible value to the industry.

The study of the milling of trashy cane was continued and results substantiate those obtained during the previous season. Sucrose extraction does not seem to be adversely affected by excessive trash. Green trash does adversely affect the quality of the clarified juice. Results are not sufficiently extensive to warrant a statement on the wear and tear on mill rolls caused by trash.

The elasticity of bagasse cannot be destroyed by compression alone. The results of a study of this question are presented.

The operation of smooth mill rolls was studied. Results were not satisfactory. This work will be continued using various sized of girth grooving.

A detailed discussion of each of the topics mentioned above is now presented.

## Milling Trashy Sugar Cane

One of the major costs in producing sugar cane is harvesting. In order to reduce harvesting costs, several attempts have been made to develop a mechanical harvester which is economically sound. During the past few years considerable progress has been made in this development work; the future outlook for mechanical harvesters is favorable, especially since labor is becoming scarce due to the present war crisis and wages increasing.

The most objectional feature of mechanically harvested cane, as far as the processor is concerned, is the trash content, or the amount of leaves and tops remaining on the cane after it is cut. Several methods for cleaning cane cut in this manner have been proposed and tried, none of which have done the job as satisfactorily as the average manual harvester. The future may change this situation, however.

The mechanical harvester, in its present stage of development, sets up several questions which are pertinent to the processor. The most important of which are, how does mechanically harvested cane affect milling operations and sucrose extraction, and how does it affect clarification and the ultimate yield of sugar.

Experimental investigation on this subject was undertaken at the Audubon Sugar Factory during the 1939 grinding season. Results of this work were presented in the thesis of William Kenda, who conducted the test. The work was supervised by Dr. A. G. Keller.

In order to help substantiate the results of the 1941 grinding season, the data obtained by Kenda is presented in Table I. The 1941 results are given in Table II. It is found from the 1939 data, that the sucrose extraction for the three tests on trashy cane averaged 92.68%, whereas the extractions for clean cane of the same variety averaged 92.3%. The results of 1941 show an average extraction for trashy cane of 91.3% or 0.19% higher than the *To-date* extraction immediately before the tests. The amount of cane ground during the 1941 tests was approximately 150 tons. This amount is enough to give representative results. Milling conditions such as, mill speed, pressure, settings, etc., were not altered for the tests on trashy cane. Thus the only conclusion that can be drawn seems to be: trashy cane with a trash content within the range studied does not lower sucrose extraction. It might be well to state that the trash in the cane was relatively green during the approximately three (3) tons before and after hand stripping.

The only difference noted between every day milling operation with clean cane and these tests was the decrease in tonnage capacity (approximately 5%) due to an increased number of mill chokes or slippage. It is believed by this writer that this difference would not be quite so noticeable in larger mills.

**TABLE NO. 1**
**Milling Results on Thrashy Cane—1939 Grinding Season**

| Test No. | 50 | 51 | 52 | 53** | 54** | 55** | To-date Figures Before Tests |
|---|---|---|---|---|---|---|---|
| Cane Variety | Co-281 first stubble | | | | | | |
| Sucrose % Cane | 11.1 | 12.45 | 11.64 | 12.08 | 12.09 | 11.70 | 10.88 |
| Fiber % Cane | 15.2 | 15.7 | 16.3 | 14.9 | 14.3 | 14.5 | 13.97 |
| Trash % Cane | 10.8 | 10.8 | 10.8 | Clean | Clean | Clean | ---- |
| Tons Cane Ground | 11.16 | 12.1 | 14.3 | 13.2 | 13.85 | 11.89 | ---- |
| Maceration% Cane | 20.12 | 26.7 | 17.45 | 20.94 | 21.65 | 17.11 | 19.9 |
| Normal Extraction | 79.62 | 79.79 | 79.13 | 79.92 | 77.98 | 76.33 | 78.6 |
| Sucrose Extraction | 92.83 | 91.73 | 92.8 | 93.04 | 92.30 | 91.44 | 92.11 |
| % Sucrose in Bagasse | 2.87 | 3.14 | 2.73 | 3.00 | 3.41 | 3.40 | 3.16 |
| % Moisture in Bagasse | 43.5 | 45.0 | 43.0 | 43.0 | 43.0 | 43.0 | 44.3 |
| Crusher Speed, ft./min. | 31 | 31 | 31 | 31 | 31 | 31 | ---- |
| Power Consumption, KWH/Ton Fiber | 63.4 | 69.4 | 65.6 | 61.2 | 64.6 | 63.4 | ---- |

* Experimental Results of William Kenda, Audubon Sugar Factory.
** These three tests were made on the same variety of cane which has been thoroughly cleaned.

**TABLE II**
**The Effect of Trashy Cane on Milling Operations**

| Test No. / Cane Variety | 63 CP-28-11 pl | 70 Mixed | Factory To-date Figures Before Tests |
|---|---|---|---|
| Sucrose % Cane | 10.3 | 9.57 | 10.95 |
| Fiber % Cane | 14.9 | 15.6 | 13.96 |
| Trash % Cane | 6.75 | 8.50 | ---- |
| Tons Cane Ground | 83.28 | 106.8 | ---- |
| Maceration % Cane | 23.9 | 25.65 | 21.6 |
| Dilute Juice % Cane | 94.59 | 92.75 | ---- |
| Normal Extraction | 77.54 | 82.37 | 75.4 |
| Sucrose Extraction | 91.63 | 90.44 | 90.84 |
| % Sucrose in Bagasse | 2.93 | 2.78 | 3.46 |
| Crusher Speed, Ft./Min. | 40 | 40 | ---- |
| Total Power Consumption, KWH per Ton Fiber | 52.61 | 48.76 | ---- |
| Power Consumption, Last Mill | 19.86 | 17.36 | ---- |

It was noted that the dilute juice obtained from each of these tests had an unusual greenish and hazy appearance, which could not be removed in the clarifiers by liming from a pH of 6.4 to 8.3. The clarified juice appeared as if it held a suspension of insoluble collodial solids. An analysis of the juice for this foreign matter, resulting from crushing trashy cane was not made. The greenish cast was evidently due to chlorophyl removed from the leaves. This impurity was not noticeable in the sugar.

## Investigation of Some New Hypotheses in Cane Milling

Considerable investigation has been undertaken at the Audubon Sugar Factory on methods of cane milling which in the past have seemed unorthodox. The suggestions for these experiments were proposed by Mr. J. J. Munson, Chairman, Industrial Committee, American Sugarcane League, on July 11, 1940 in a letter to Dr. A. G. Keller, then superintendent of the Factory.

The following are excerpts taken from Mr. Munson's letter:

"I have read with much interest your preliminary report covering studies of cane milling. Such tests as you are conducting will certainly give much needed information concerning the construction and operation of cane milling and equipment and I trust you will spare no effort in following up the good work which you have begun.—I trust more experimenting will be done with pressures and, if possible, higher pressures used. I have an idea that much better work might be done in mills by using lower temperature maceration and much higher pressure than we are now using. As a matter of fact, there is probably some particular pressure up to and at which extraction will be very much increased but beyond which little or no increase would take place. I have in mind the amount of pressure just sufficient to press the mat to such an extent that it will not re-expand. I do not know just how much pressure is required for this but I believe it should be determined. I believe the increase in extraction for the increments of pressure in the higher brackets can be attributed to two things, first, the approach for the optimum unit pressure, as mentioned above, and, second, for the reason that, as the hydraulic loading is increased, a greater portion of the increased load is used up in raising the pressure between the rolls, the latter having involved in it factors which but few mill operators and engineers have observed.

"I am convinced that the top roll of a mill is reacted upon by the pressure over the turnplate to a far greater extent, than most people realize. As a matter of fact, I believe that, during a considerable part of the time that a mill operates, as much as half the hydraulic load is balanced off by the reaction of the turnplate. I know that under certain conditions practically the whole hydraulic load is balanced off from this cause.

"It has been pretty well established that the coefficient of friction of bagasse on the turnplate goes down rapidly with increased unit pressures. It is also known that this coefficient is lowered by increased speed. I am relatively sure that the coefficient of friction of bagasse on the turnplate is the main factor that establishes the unit pressure on the plate and, consequently, the reaction against the top roll. I believe that the setting of the turnplate has little to do with the pressures on it while the mill is in operation except that a low setting probably results in a higher pressure on the plate than a high one up to a certain point.

"If the above reasoning is correct, we would naturally expect a slow speed mill to require heavier loading for the same extraction than a proper higher speed mill even though the thickness of the mat is the same through each. This has been pretty much observed to be the case in practice.

"For any mill speed, however, it is pretty safe to assume that, when pressure is applied to the top roll, the first thing that has to be overcome is the fairly constant reaction from the turnplate. After this, the added loading builds up rapidly the pressure between the rolls which is, after all, the thing that does the extracting. From this statement and the above discussion, it would, therefore, seem reasonable to expect an irregularity in the curve showing the effect of pressure on extraction and, of course, this irregularity will occur at different points, depending on the peripheral speed of the rolls, the coefficient of friction on the turnplate and the variety of cane. My idea is that the pressure between the rolls, necessary to eliminate the sponge effect of the mat by pressing the fiber into a solid wood sheet, might easily be reached in practice. If this can be done, it may be that cold water maceration could be used and yet obtain excellent extraction without lowering the purity to even the extent as occurs when lower pressures and hot water are employed. Certainly, if we can reach the point of pressure where the mat does not re-expand, we can eliminate almost entirely the reaction from the turnplate.

"To work on this principle would require that at least in the last mill, there would have to be employed either rolls with no grooves or rolls with very fine grooves and I am not so sure but this would give better extractions in any event. The South Coast Corporation formerly used almost altogether ½ in. girth grooves and cross grooves in the last mill. Recently the cross grooves have been dispensed with and the mills feed as well or better than they did with cross grooves. Finer girth grooves than ½ in. have not yet been tried but I am convinced rolls so equipped would feed better. To eliminate the grooving altogether or at least down to, say 8 grooves per inch would probably give the best feeding condition for back mills. I say this for the reason that, as mentioned above, the coefficient of friction goes down rapidly with pressure. Therefore, on large grooves, there is considerable pressure consumed at the points on the roll which comprises only a small area. Consequently, low coefficients at this point are to be expected. This results in smoothing up the points which is the thing that prevents a mill from feeding. This can easily be proven by lightly knurling these points after they become smooth, which results in a very much better feeding condition and an immediate lowering of the moisture in the bagasse, proving that more pressure has been brought between the rolls, which, without changing the hydraulic load, means that some of the reaction from the turnplate is eliminated by knurling.

" * * *. If we are to obtain low moisture from the back mill, we must prevent soft spots in the mat and, such being the case, we must have no cutaway surface in the rolls that do not mesh to bring the rolls in close setting. This would indicate that we must forget about cross grooves and, if you take away the cross grooves, you have no particular use for the large girth grooves. Therefore, in our experimental work, it seems to me the first thing we should determine is how well a back mill will feed with rolls containing no grooves and, second, if there is any improvement in feeding by the use of very fine grooves, such as 8 or 10 to the inch.

"We should by all means find out what unit pressure exists between the top roll and the turnplate for varying speeds and roll loading. We should find out if the turnplate clearing has any effect on these pressures. * * *. We should determine if it is possible to reach such pressure on the mat as will kill the sponge effect.

"Obtaining all this information will, of course, require a long drawn out schedule but for the present, it would seem to me that a set of rolls containing no grooves at all should be provided for your mill. There should be a turnplate provided having circular curvature and approximately concentric with the top roll; in other words, no clearance. The plate should be arranged for quick changes in setting but initially should be run at an extreme upward setting and then an extreme low setting. In each position the mill

should be run at a number of speeds, corresponding, however, in the two settings of the plate. When the mill is in constant operation at each of the speeds and position of the top roll determined, after which the load should be partially removed and both bagasse and cane rolls pulled back so they do not touch the top roll. The load should then be increased until the top roll goes back to its operating position, at this point a record made of the hydraulic load. From this and knowing the area of mat in contact with the top roll and turnplate, the pressure per sq. in. can be obtained. The bagasse on the turnplate should then be removed, analyzed particularly for moisture, and weighed. The variation in these pressures so determined will give the most valuable data that we have ever had on mills. This experiment can be repeated, using a turnplate clearance and using various sized roll grooves, etc. Knowing the pressures which exist on the turnplate for the various conditions, we can reproduce them in a machine and determine the coefficient of friction at the approximate speed developed under the mill test conditions. With the pressures and coefficient of friction, we can completely analyze the performance of the mills and thereby determine what to do in order to get maximum extraction as far as mechanical factors in the mills are concerned."

Having these ideas, as a basis to work on, three separate experiments were undertaken, namely:

(1) A study of the behavior of bagasse under compression with pressures ranging upward to 15,300 pounds per square inch.

(2) The determination of the pressure exerted by bagasse on the turnplate.

(3) A study of the operation of smooth rolls.

## Behavior of Bagasse under Compression

Noel Deerr[1] in 1912 performed tests which enabled him to study the properties of cane fibers under compression. However, he did not report any work on the re-expansion of bagasse.

The development of new varieties has altered the physical properties of sugar cane considerably. Thus it seemed desirable to repeat similar tests on varieties of cane being grown at the prseent. The main purpose of this series of tests was to determine whether or not fresh bagasse from the mills could be subjected to a pressure which would destroy its power of expansion.

Acknowledgment is made to Dr. Utah Tsao for obtaining the experimental data on this subject.

## Description of the Apparatus

The apparatus used were as follows: a compression machine with a total capacity of 200,000 pounds, a plunger with a diameter of 4.08 inches, a steel cylinder fitting the plunger snugly, a steel disc to collect the juice squeezed out of the bagasse, a table balance, equipment to determine the moisture and sugar in the bagasse, and a micrometer gauge.

## Procedure for Testing

Bagasse samples were collected at the discharge of the third mill. A part of the sample was used to determine the sugar and moisture content of the bagasse. One hundred (100) grams of bagasse were weighed out and put into the compression machine. Pressure was gradually applied to the plunger. The pressure was maintained constant for three minutes at pre-determined pressure readings. The total time interval between two successive readings was five minutes. The distance between the compression table and the bottom disc was measured with a micrometer gauge, which could give reproducible readings within 0.001 inches. These readings were taken as soon as the pre-determined pressures were reached. From the dimensions of the compression set, the thickness of the bagasse was calculated. The juice squeezed out was absorbed by pre-weighed absorbent paper. The paper was weighed immediately after absorbing the juice. The final bagasse cake was also weighed. Thus, the total amount of juice squeezed out of the bagasse could be determined. The amount determined in this way was 2 to 3 grams more than the sum of the successive amounts of juice squeezed out under increasing pressures. This excessive amount was added to the first reading of the test. After the test was over the walls of the compression cylinder, the plunger, and the perforated bottom plate were wiped with absorbent paper. The amount of juice collected in this way totaled 1 to 2 grams. This amount was also added to the first reading of the test.

## Discussion of the Results

The moisture and fiber content of the bagasse varied from one test to another. Therefore it was difficult to compare the thickness of bagasse under the same pressure in different tests. For better comparison an arbitrary unit was introduced. The thickness of the bagasse was expressed as inches per pound of fiber per square inch of cylinder area.

All tests which were made on the bagasse directly from the mill indicate that there is a change in the condition of the fibers at a pressure around 1500 pounds per square inch. It can be assumed that the decrease in volume by increased pressure in the higher range is due to the crushing of the cells of the fiber and the formation of a more compact mass. The same condition is indicated for dried bagasse but at a higher pressure, about 2500 pounds per square inch.

The data on expansion of the bagasse after being compressed shows that bagasse will expand even after being subjected to a pressure of 15,300 pounds per square inch.

However, the bagasse loses some of its expansive power, and this indicates that some of the fibers have reached their elastic limit upon repeated stress.

## Proposed Investigation

Since one of the problems facing us is the determination and elimination of the reaction pressure of the bagasse on the turnplate, if possible, it would be desirable to make a complete study of the expansion of bagasse under those pressures resulting from actual working conditions. This pressure range is estimated at 400 to 2500 pounds per square inch.

Therefore it is proposed that a series of tests be made as follows:

Compress a quantity of bagasse to approximately the same thickness that the action of the rolls do and allow it to expand under reduced pressures, then re-compress it. This will correspond, to some extent, to the stresses which the bagasse undergoes when it passes the feed roll, expands, gradually recompressed by turnplate, and further recompressed by the discharge roll.

In order to undertake the tests which will give the desired results, close observance of the height of the bagasse entering the feed rolls and the rise

of the top should be made. By knowing the amount of rise of the top roll and the feed opening, the approximate thickness of the layer of bagasse between the rolls can be determined, as well as the distance between the top roll and the turnplate. Thus, the actual height which the bagasse expands is then known. If the original thickness of the bagasse under the plunger is comparable to that between the feed rolls and the amount of fiber per unit area is the same, the pressure resulting for a definite expansion will give conditions similar to those which the bagasse is under as it passes over the turnplate.

It should be pointed out that these proposed tests may not be comparable to milling conditions, because it must be assumed that the bagasse expands so as to completely fill the opening between the top roll and the turnplate. In actual practice, it is believed that this opening is filled when the mill first starts and some of the bagasse begins to roll or "ball-up". If this is true, then the bagasse leaving the feed roll cannot expand to the extent that it fills this opening, because some excess material is there at all times.

Noel Deerr[1] estimated the pressure on the turnplate as about one-fortieth of the pressure between the rolls, however due to the failure of several turnplates, the pressure from calculations using the data which he found from the tests on compression of bagasse. He did not consider the possibility that some excess material was there at all times.

[1]Ibid., page 23.

## Conclusions

1. The fiber of bagasse cannot be made to lose its reexpanding power under a pressure as high as 15,300 pounds per square inch in an hour. This is also true of dry bagasse.
2. The thickness of final bagasse cake varies slightly with the different varieties of cane from which the bagasse is derived.
3. The Noel Deerr[1] formula, $p\ H^5 = C$ only holds for a narrow range of the results of the tests made.
4. Noel Deerr stated that under high pressures the volume of juice squeezed out of the bagasse was equal to the volume displaced by the plunger. This was not found to be true in these tests.

[1]Ibid., page 23.

## An Estimation of the Pressure on the Turnplate

In order that some estimate of the actual reaction pressure of the turnplate could be made, the following tests were undertaken.

### Test No. 1

The mill was run continuously with a thick blanket of bagasse in order that the top roll might be floating. It was stopped instantly and the following data were taken:

(1) Force applied to the top roll.
(2) Height of both ends of roll above their respective seats.

The force was then released and the second item of the above was again measured, thus giving the expansion of the bagasse with only the weight of the roll on it.

The lower rolls were taken backed off and the load was applied, until the top roll had reached its original position, this force was recorded as the force exerted on the turnplate.

The results are as follows:

(1) Initial force on top roll = 111 tons.
(2) Pressure being released, the bagasse expanded so as to raise the free end of the roll 0.172″ and the geared end 0.0468″.
(3) After backing off the lower rolls and returning the top roll to its original position the load was 55 tons.

Neglecting the extended area of the scrapers, the turnplate area was found to be 120.75 sq. in.

Thus the turnplate

$$\text{pressure} = \frac{55 \times 2000}{120.75} = 911\ \#/\text{sq. in.}$$

All linear measurements were taken with calipers.

### Test No. 2

The mill was fed heavy as in Test No. 1.

(1) Initial load = 116.5 tons.
(2) The load was released and the top roll was raised by the expanding bagasse 5/32″ on the free end and 3/64″ on the geared end. The load was applied again until the top roll was in its original position. The load required to regain this was 98 tons, or 18.5 tons less than the original load. Thus showing that the bagasse is more easily recompressed or that some juice is removed under recompression, even though the space between the turnplate and roll remain the same.

The load was released again and the bottom rolls were lowered. The load was applied until

*Established 1912*

**E. A. RAINOLD, INC.**

**SUGAR AND MOLASSES BROKERS**

ROOM 411 MARINE BLDG.
219 CARONDELET STREET

**Phone RAymond 0679 - - NEW ORLEANS, LA.**

**Daily Market Information and Weekly Market Letter Furnished on Request**

**Our services are exclusively for our clients, as we do not trade in sugar, molasses, or syrup for our own account.**

# We have faith in the future of America... and America's Cane Sugar Industry

It is significant that the American eagle has symbolized the products of the Fulton Bag & Cotton Mills for 72 years. Since the very beginning, this organization has believed in America and American-grown products.

Today the nation looks to the Sugar Cane Industry within the continental United States as its basic source of supply for vital war materials—and you are responding with true American energy and loyalty.

We salute the members of the American Sugar Cane League, for the great job now being done. We welcome the opportunity to serve your needs for cotton bags for raw or refined sugar, in every size and type. For quality and service, see FULTON, *first.*

# FULTON

**Bag & Cotton Mills**

**New Orleans, La.**

Atlanta - New York - St. Louis - Dallas - Minneapolis - Kansas City


the roll was in its original position. The resulting force was 57.5 tons.

$$\text{Turnplate pressure} = \frac{57.5 \times 2000}{120.75} = 954 \text{ \#/sq. in.}$$

### Test No. 3

The initial load on the top roll was 88 tons. The load was released and the top roll was raised 1/8″ on the free end. The same pressure was applied and it was found that the toll was lowered 1/64″ farther than originally. Showing that the bagasse is compressed more by applying the same load repeatedly, which agrees with Test No. 2.

### Discussion

The resulting pressures found on the turnplate are probably high due to the fact that the lower rolls could be backed off only about 3/8″. This clearance is not enough to allow the bagasse to expand completely. Thus some of the pressure was exerted on the lower rolls. Since the rise of the top roll was not the same on both ends, it is felt that the geared end was not completely free. If this was true then, some of the load was absorbed at that point.

Before any definite conclusions can be made, it is felt that more tests should be undertaken. However, the results *indicate* that the pressure on the turnplate is such that about one-half of the total load is absorbed by the turnplate.

### The Operation of Smooth Rolls

The problem is: how and to what extent does the pitch and depth of grooves on rolls of sugar mills affect the feeding characteristics and the ultimate yield of sucrose.

Three smooth rolls were put into operation on the last mill at the Audubon Sugar Factory near the close of the 1941 grinding season. These rolls were in operation two days. During this time, approximately 150 tons of cane were milled. The results of the two tests are given in Table III.

**TABLE III**
**Performance of Smooth Rolls**

| Test No. | 72 | 73 | To-Date Figures Before Tests |
|---|---|---|---|
| Cane Variety | Co-290 | Co-290 | ---- |
| Sucrose % Cane | 9.66 | 9.25 | 10.7 |
| Fiber % Cane | 12.6 | 12.0 | 13.94 |
| Tons Cane Ground | 79.515 | 71.87 | ---- |
| Maceration % Cane | 29.11 | 19.95 | 22.13 |
| Sucrose Extraction | 91.07 | 89.7 | 90.92 |
| Bagasse % Cane | 34.94 | 32.1 | 29.08 |
| % Moisture in Bagasse | 60.37 | 55.7 | 47.45 |
| % Sucrose in Bagasse | 2.48 | 3.14 | 3.36 |
| Mill Speed, Ft./Min. | 39.7 | 39.7 | ---- |
| Power Consumption of Last Mill | | | |
| KWH/Ton Fiber | 8.58 | 11.24 | ---- |
| KWH/Ton Cane | 1.08 | 1.35 | ---- |

### Discussion of the Results

Considerable difficulty was encountered, due to slippage. The mill log showed that for Test No. 72 the Messchaert grooves plugged and there were 69 chokes in 6 hours; the grooves were then cleaned, and there were 27 chokes in 4 hours. The resulting lost time due to chokes on the smooth rolls was about 14.5% of the total grinding time. The lost time due to chokes was usually from 2 to 8% of the total. The cane ground was Co-290, which is of very soft fiber and is difficult to mill with 1″ pitch grooving. Thus a true comparison to most of the varieties ground cannot be made.

The sucrose extraction was lower than usual. The bagasse moisture was extremely high. The first test

shows bagasse moisture equal to 60%. During part of this test practically all the hydraulic load was released. This was done in order to get proper feeding. The second shows 55.7% moisture. The pressure for this test was maintained constant at about 45 tons per linear foot. Feeding was somewhat easier, even though the lost time was about the same as for the first test.

The power consumed by the smooth rolls was lowered from about 35% for regular rolls to about 23% of the total power consumption. Thus the power consumption for smooth rolls should be about 12% lower than for rolls with 1″ pitch grooves.

It is believed by this writer that enough data was not obtained on the operation of smooth rolls. Therefore it is suggested that the rolls not be grooved during the 1942 grinding season. The rolls should be put into operation during some week-end towards the middle of the season and operated for at least one week. All of the tests suggested in Mr. Munson's letter should be made.

[1]Ibid., page 23.

## Notice of Meeting

**A meeting of the Manufacturing Section of the Louisiana Sugar Cane Technologists' Association is called for 10 A. M., June 30th, at the Houma Experiment Station, Houma, La.**

## Results of Experiments with Chlorotic Streak in 1941

*(by E. V. Abbott, Division of Sugar Plant Investigations, Bureau of Plant Industry, United States Department of Agriculture[1])*

Field experiments with chlorotic streak in Louisiana, the results of which in 1940 were reported in a previous article[2], were continued in 1941. The results last year confirmed those previously obtained showing the potential importance of the disease on several of the commercial varieties of sugarcane, and gave new information regarding the relative resistance of some of the unreleased seedlings.

### Effect of the Disease on Yields

In the fall of 1939 an experiment was planted on light soil at Raceland in which 10 plots 1/110-acre in size were planted with chlorotic-streak-diseased seed of C.P. 28/19 and 29/320, in comparison with an equal number of plots of healthy seed. The plant cane results obtained in 1940 showed reductions for C.P. 28/19 of 4.3 percent in germination, 1 percent in cane per acre, and 9 percent in sugar per acre; and for C.P. 29/320, 31 percent in germination, 16.3 percent in cane per acre, and 26.3 percent in sugar per acre, from planting diseased seed. All reductions for C.P. 29/320 were statistically significant, while for C.P. 28/19, only that for sugar per acre could be so considered. This experiment was continued as stubble in 1941 and the results obtained are presented in table 1.

CHARLES WIGGIN

*BRIDGEPORT BRASS COMPANY* — *Copper Tubes*
*COMBUSTION ENGINEERING CO.* — *Boilers*
*FOSTER MANUFACTURING CO.* — *Filter Cloths*
*GOSLIN-BIRMINGHAM MFG. CO.* — *Mills-Crusher and Evaporators*
*HORACE G. PRESTON CO.* — *Wearwell Hydraulic Leathers*
*MUNSON AIR HYDRAULIC ACCUMULATOR*

*ROTARY CANE KNIVES*
*NEW AND USED SUGAR MACHINERY*

400 BALTER BUILDING
NEW ORLEANS, LOUISIANA

**MOTOR and TRACTOR OILS**
**STEAM CYLINDER OILS**
**NOFLO CENTRIFUGAL OILS**

**CHOPPER and GEAR GREASES**
**MILL JOURNAL GREASES**
**PRESSURE and CUP GREASES**

We specialize in the manufacture of Sugar Mill and Field Machinery Lubricants.

*Quality products made in Louisiana by Louisianians.*

INTERNATIONAL LUBRICANT CORPORATION
New Orleans, - - - - - - - - - Louisiana

Table 1. Effect of chlorotic streak on yield of cane and sugar per acre of C. P. 28 19 and C. P. 29 320 first-stubble, on light soil, Raceland, Louisiana, 1941.

| Variety | Tons of cane per acre | | | Pounds of sugar per acre | | |
|---|---|---|---|---|---|---|
| | Healthy | C. S. | Reduction by C. S. | Healthy | C. S. | Reduction by C. S. |
| | | | % | | | % |
| C. P. 28/19 | 23 3 | 18 7 | 19 7 | 5181 | 3802 | 26.6 |
| C. P. 29/320 | 20 5 | 9 6 | 53 2 | 4262 | 1850 | 56.6 |

All reductions shown in the table are highly significant. By comparing these figures with those quoted above from the 1940 report, it will be apparent that the disease was much more severe in both varieties as first-stubble than as plant-cane. This resulted largely from the loss of stand, many infected stools of both varieties failing completely to germinate as stubble. This effect was considerably more marked with C.P. 29/320 than with the 28/19, confirming the plant-cane results in indicating that the former variety is more severely damaged by the disease than the latter.

A similar test on a smaller scale was carried out on mixed soil at Montegut in 1941 with the C.P. varieties 807, 29/103 and 29/320. In this test there were 6 replications each of healthy and diseased plots 1/300-acre in size for each variety. The results appear in table 2.

Table 2. Effect of Chlorotic streak on germination and yields of cane and sugar per acre of 3 varieties of sugarcane on mixed soil. Plant cane, Montegut, Louisiana, 1941.

| Variety | Germination | | | Tons of cane per acre | | | Lbs. of sugar per acre | | |
|---|---|---|---|---|---|---|---|---|---|
| | Healthy | C.S. | Reduction by C.S. | Healthy | C.S. | Reduction by C.S. | Healthy | C.S. | Reduction by C.S. |
| | % | % | % | | | % | | | % |
| C. P. 807 | 32.8 | 21.6 | 34.1 | 23.4 | 16.1 | 31.2 | 4151 | 3212 | 22.6 |
| C. P. 29/103 | 21.3 | 9.6 | 54.9 | 25.6 | 16.1 | 37.1 | 4570 | 2582 | 43.5 |
| C. P. 29/320 | 24.4 | 11.2 | 54.1 | 21.2 | 14.1 | 33.5 | 4629 | 3115 | 32.7 |

All reductions shown in table 2 are highly significant. It is apparent that very serious losses would be sustained by these varieties if chlorotic streak were to reach a high level of infection in them. Lest these results seem too alarming, however, it should be pointed out that they were obtained from planting 100 percent diseased seed in comparison with apparently healthy seed. Thus far no variety has become diseased to that extent in Louisiana, and it probably would require several years of unmolested increase by the disease before such a condition would be approached. Nevertheless, it is obvious that with even 50 percent infection of seed cane, serious losses would be entailed, and the importance of efforts to control chlorotic streak before it assumes more serious proportions is obvious. Prior to the campaign of rogueing that was instituted several years ago on several plantations, the writer observed a large field of C.P. 29/320 plant-cane with an average of 25 percent infection, in which the effect of the disease on growth, and the following year on stubbling, was such as to indicate that the figures in tables 1 and 2 are not far wrong.

Studies of the disease in the above varieties in the field and the greenhouse indicate that the cumulative effect or rate of build-up is considerably more rapid in C.P. 29/103 and 29/320 than in C.P. 807. This results partially from the lower rate of secondary spread into C.P. 807 when grown under comparable conditions, but also from the greater tendency of this variety to throw off or recover from the disease after it once becomes infected. In 1940 and 1941, for example, 150 stools of each variety that had come up diseased from diseased seed were marked with permanent stakes, and observed at frequent intervals throughout the season for the presence or absence of the characteristic leaf streaks by which the disease is identified. Approximately 20 percent of all infected shoots arising in the stools of C.P. 807 were free of these symptoms by the end of the season, compared with approximately 5 percent of those of the C.P. 29/320, and 4 percent of the C.P. 29/103. In some instances the loss of leaf symptoms was permanent, in others only temporary.

That this loss of leaf symptoms represented actua- recovery from the disease in many instances was determined in the greenhouse. The mature stalks, from the stools referred to above, both with and without leaf symptoms, were cut into single-eye pieces and planted in indiivdual pots in the greenhouse, and the number producing diseased or healthy plants was determined. This work is not yet complete, but it may be said that the number of healthy plants produced from the apparently recovered stalks of C.P. 807 was very much greater than for C.P. 29/320. In other words, more recovery from the disease actually occurred in the former than in the latter variety.

### Varietal Resistance Tests

Varietal resistance tests designed to determine the relative susceptibility to infection by chlorotic streak of the commercial and leading test field varieties were conducted during the year at Raceland and Montegut. In these tests the varieties were planted with hot-water-treated seed in replicated plots which were bordered by strips of chlorotic-streak-diseased cane, thus providing conditions favorable for secondary spread of the disease. It has become apparent in these

LeBourgeois Brokerage Company
SUGAR BROKERS
203 Levert Bldg., 823 Perdido Street
Phone RA { 0618 / 0619 - NEW ORLEANS

tests that reliable results on the rate of secondary spread of the disease can not be obtained until the stubble year, since many plants that become infected during the plant-cane year do not show the characteristic leaf symptoms until the stubble year.

In the fall of 1939, 10[3] varieties were planted in a test of this type with 4 to 6 replications of 1/100-acre plots of each. All diseased stools appearing in the originally healthy cane throughout the 1940 and 1941 growing seasons were marked with permanent stakes, and the final percentage of infection was determined based on the original number of healthy stools present in the plot. The percentages of infection occurring in this test through the first-stubble year are tabulated below:

| | | |
|---|---|---|
| C.P. 28/19 | 7.3 | percent |
| C.P. 29/103 | 10.8 | " |
| C.P. 29/137 | 12.1 | " |
| C.P. 29/320 | 10.7 | " |
| C.P. 31/509 | 9.3 | " |
| C.P. 32/324 | 8.3 | " |
| C.P. 33/243 | 4.7 | " |
| C.P. 34/79 | 22.7 | " |
| C.P. 34/120 | 7.1 | " |
| Co. 281 | 1.9 | " |

The degree of susceptibility shown by C.P. 34/79 in this test, as well as in plantings of the variety observed in other localities during the year, indicates that chlorotic streak control would be a problem if the variety were extended to commercial cultivation. In some larger increase plantings, the rate of spread was considerably greater than that shown above. Whether chlorotic streak could be controlled in this variety by roguing in an area where the disease is well established is doubtful.

C.P. 29/103, 31/509 and 29/137 were about equal in susceptibility to C.P. 29/320 in this test. The latter variety is used as a standard of measurement since more is known about the disease and its control in it than in any other. In view of the adverse effect of the disease on yields of C.P. 29/103, as shown in table 2, the importance of making every effort to keep infection in it at a low level is obvious. The effect of the disease on C.P. 31/509 and 29/137 is being determined in a test planted in the fall of 1941.

Spread of chlorotic streak in C.P. 34/120 was about equal to that in C.P. 28/19, and was such as to emphasize the importance of maintaining disease-free seed supplies of this variety which, because of its

R. J. LeGardeur Lloyd R. Marks

R. J. LE GARDEUR & COMPANY

CERTIFIED PUBLIC ACCOUNTANTS

1002 Baronne Building NEW ORLEANS

305 Baronne St. Phone Raymond 3006

HARRY L. LAWS & CO., Inc.

Established 1871

AMERICAN BANK BLDG., NEW ORLEANS, LA.

*BROKERS & DISTRIBUTORS*

SUGAR AND MOLASSES

1917 - 1942

TWENTY-FIVE YEARS

Serving Louisiana Cane Growers especially designed and manufactured equipment for Louisiana sugar cane cultivation and harvest requirements.

Allis Chalmers Cane Special Tractors
Thomson Cane Special Cultivating Tools
Thomson All Steel Cane Wagons
"Hurry-cane" Harvesters

THOMSON MACHINERY COMPANY Inc.
LABADIEVILLE, LA.

otherwise favorable characteristics, is now in the stage of rapid expansion in anticipation of its release for commercial culture. The extent to which C.P. 34/120 will be injured by the disease remains to be determined.

C.P. 33/243, released in the fall of 1941 for commercial culture, showed a considerably lower rate of spread in this test than did C.P. 29/320. This suggests that the disease may be less of a problem in the variety than was indicated earlier when chlorotic streak was first discovered in Louisiana. Based on past experience with C.P. 29/320, roguing should give satisfactory control in the apparently less susceptible C.P. 33/243. Small scale tests indicate that germination of the latter may be as severely reduced, however, as that of C.P. 29/320, so it is apparent that seed supplies of this newly released variety be maintained as free of the disease as possible.

A test similar to the above in which 15 unreleased test field varieties were included, was planted in the fall of 1940. Final results will not be obtained from it until the end of the stubble year in 1942. In the fall of 1941, additional tests were planted at two localities in which were included 8 of the leading unreleased test field varieties and 15 of the 16 new seedlings introduced at the test fields in 1941.

In spite of the fact that field tests of this nature require considerable time and land in order to obtain necessary information regarding resistance of the new seedlings to chlorotic streak, they are as yet the only reliable means of obtaining such information. Unlike mosaic, for which an effective method of artificial transmission has been developed, it has not been possible in Louisiana to transmit chlorotic streak by any artificial method of inoculation. It has been determined, however, that the disease is spread from diseased to healthy plants in the field by the common leafhopper, *Draeculacephala portola*[4], and attention is being given to the possibility of determining relative varietal resistance by means of caging potted plants of the seedlings with the insects. However, the known insect vector appears to be rather inefficient in greenhouse tests, i.e., a low percentage of plants that are subjected to feeding by the insects after the latter have fed on diseased plants, become infected, and in order to obtain reliable information on the relative resistance of a number of varieties by this method, the equipment required would overtax present available facilities.

Even though the known insect vector of the disease may be inefficient in the greenhouse, and even assuming that it may be equally so in the field, by sheer force of numbers it is in position to insure rapid multiplication and spread of chlorotic streak in Louisiana. In surveys made by the entomologists[5] this insect was found to be more numerous on sugarcane in Louisiana than all other sucking insects combined, excepting only the mealybug. Anyone who walks through a sugarcane field in this State and observes the large numbers of the leafhopper feeding on cane, will realize that any disease spread by it has an excellent chance of rapid spread, provided that enough diseased plants are present to serve as the initial sources of infection.

### Control of the Disease

The statements made in last year's report regarding roguing seed plots as a successful means of controlling chlorotic streak have been borne out by an additional year's experience. The practice of roguing

PENICK & FORD LTD., INCORPORATED

Buyers and Sellers

OF

Syrups and Molasses

1449 Canal Bank Bldg. - - - - New Orleans, La.

was continued with success in 1941 on several of the larger plantation units, and was extended to other plantations and farms. It is to be recommended with all of the present commercial varieties that are at all susceptible to the disease, and this would probably include all of them except Co. 281 and Co. 290. The indications are that chlorotic streak will not become a problem in either of these varieties. Thus far only slight spread into C.P. 29/116 has been observed, but since several other varieties of the same breeding have shown a high degree of susceptibility, the 29/116 should be carefully watched since its freedom from infection so far may be largely because it has escaped, rather than because it is resistant.

Equipment for treating large quantities of seed cane with hot water, which kills the chlorotic streak infection in the stalks, has been set up on several planations in Louisiana during the past year, and the future may see an expansion of the practice of hot water treatment of seed cane. However, it will probably be some time before such equipment is available for treating all seed cane that should be so treated for controlling the disease in chlorotic-streak-infected areas. In the meantime, roguing field of susceptible varieties that will be used for seed is recommended as a practical means of holding infection at a low level. Complete control of the disease, of course, will seldom be achieved by this means.

[1]The writer is indebted to Robert L. Tippett for assistance in conducting the experiments discussed in this article.

[2]Abbott, E. V. Results of experiments with chlorotic streak in 1940. Sugar Bulletin 19(14): 60-61, 1941.

[3]C.P. 29/137, 31/509, 32/324, 34/79, and 34/120 have not been released for commercial culture.

[4]Abbott, E. V., and Ingram, J. W. Transmission of chlorotic streak of sugarcane by the leaf hopper, *Draeculacephala portola*. Phytopathology 32(1): 99-100, 1942.

[5]Ingram, J. W., Haley, W. E., and Charpentier, L. J. Insect vectors of sugarcane mosaic in continental United States. Proc. 6th Cong. Internat. Soc. Sugar Cane Techn., pp. 483-494, 1939.

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

**Help Our Country**
**Buy**
**WAR BONDS**
**and**
**STAMPS**

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

# Minimum Wages For Puerto Rican Sugarcane Laborers Announced

*(Official Release)*

Minimum wages to be paid sugarcane laborers during 1942 in Puerto Rico by producers who apply for payments under the Sugar Act of 1937 were announced May 19th by the U. S. Department of Agriculture.

Basic wage rates have been increased 30 cents per 8-hour day over 1941. A bonus system, which becomes effective when the price of raw sugar exceeds $3.749 per hundred pounds, will further increase grinding season wages by 10 cents, and those for the "dead season" by 5 cents, for every 25-point increase in the price of sugar up to $4.499. The bonus system during 1941 did not apply to the "dead season".

The Sugar Act requires, as one of the conditions of payment to growers, that all persons employed on a farm in the production, cultivation, or harvesting of sugarcane be paid in full for all such work at rates not less than those determined by the Secretary of Agriculture to be fair and reasonable, after investigation and public hearing. The hearing was held in San Juan, Puerto Rico, on February 7, 1942.

The determination establishes minimum daily rates of pay for the various types of work for an 8-hour day, and provides for payment of overtime at double

**Robert Gottschalk, Inc.**

914 UNION ST., NEW ORLEANS

TELEPHONE NOS.
RA. 6245
RA. 6244

*Specialists in Sugar Factory Insurance*

*Let us show you how to save money on your Insurance.*

**Castagnos Cane Loader Co.**

IMPROVED CASTAGNOS CANE LOADER MOUNTED ON PNEUMATIC STEEL WHEELS

IMPROVED HIGH SPEED S INGLE BLADE STUBBLE SHAVER, TRACTOR DRIVEN

*SHOP: DONALDSONVILLE, LA.*

*OFFICE: 400 BALTER BLDG., NEW ORLEANS*

the basic hourly wage. The rates per day follow (those in parentheses apply to farms in the mountain sections where about one percent of the Island's sugar is produced):

| | | |
|---|---|---|
| Cartmen in cultivation work | $1.40 | ($1.30) |
| Ditch-diggers, plow-steermen, operators of irrigation pumps, ditch-loppers, irrigators when working in water | 1.51 | (1.40) |
| Tractor operators | 2.00 | (1.84) |
| Sugarcane cutters; crane operators and dumpers | 1.51 | (1.40) |
| Cartmen in harvest work | 1.68 | (1.51) |
| Portable-track handlers and car loaders | 1.75 | (1.68) |
| Cane cart loaders | 1.62 | (1.51) |
| All other kinds of work | 1.30 | (1.30) |

In the case of ditchmakers or cleaners who work in water, the applicable rate covers the first seven hours of work performed in any 24-hour period.

The determination provides for increases over the basic daily wages in the event the average price of sugar in any fortnight is more than $3.749 per hundred pounds, raw value. The scale for the increase is as follows:

| Fortnightly Average Price of Sugar per cwt. | Increase Per Day Over Basic Day Wage | |
|---|---|---|
| | For Period Jan. 1-June 30, 1942 | For Period July 1-Dec. 31, 1942 |
| Over $3.749 to 3.999, inclusive | 10 cents | 5 cents |
| Over $3.999 to 4.249, inclusive | 20 cents | 10 cents |
| Over $4.249 to 4.499, inclusive | 30 cents | 15 cents |

Persons employed on an hourly basis are to be paid the hourly equivalent of the daily rates. Persons employed on a piece-rate basis are to be paid at rates which will result in earnings not less than the equivalent of the hourly rates, or of the hourly rates plus overtime rates, whichever is applicable.

Producers are to furnish laborers free of charge the accessories customarily furnished by them, such as a dwelling, garden plot, pasture lot, and medical services.

Puerto Rico is the only domestic sugar producing area in which wage rates for a considerable part of the agricultural labor employed in the production of sugarcane have for a number of years been determined by collective bargaining between labor organizations and sugar producers.

SPRING PLANTING

Reuter offers a large and complete assortment of Seed Corns, Clover, Lespedeza, Grasses, Soy and Velvet Beans, Cowpeas and all leading Farming and Field Seeds for sowing in the South.

*Illustrated Catalog Free*

**Special Prices Quoted on Request**

**REUTER SEED CO., INC.**
**NEW ORLEANS, LA.**

**TO PRODUCE HIGH-DENSITY CANE SYRUPS . . .** protected against sugaring and fermentation—

**USE CONVERTIT**

A yeast enzyme . . . the use of which is recognized by the U. S. Department of Agriculture.

***Order a one, five or ten-pound bottle of Convertit and write for information.***

**THE NULOMOLINE COMPANY**
120 WALL STREET, NEW YORK, N. Y.

**Louisiana (Mill Reports) Production of Sugars, Sirup, Molasses and Tons of Cane Ground—1933-1941**

| | 1933[1] | 1934[2] | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 |
|---|---|---|---|---|---|---|---|---|---|
| Raw Sugar 96° | 133,574 | | 244,208 | 257,710 | 291,313 | 396,955 | 356,166 | 177,021 | 252,176 |
| Clarified Raw Value | 13,547 | | 15,284 | 18,254 | 18,172 | 11,161 | 8,423 | 1,294 | 2,731 |
| Turbinados | 6,088 | | 13,757 | 12,661 | 21,367 | 27,022 | 23,345 | 16,673 | 25,425 |
| Granulated | 51,527 | | 57,037 | 82,236 | 55,235 | 47,590 | 45,145 | 37,464 | 31,991 |
| Washed Raws | 1,500 | | 3,809 | 2,782 | 3,094 | 122 | 939 | 1,236 | 7,776 |
| String—Others | 5,719 | | 6,797 | 9,870 | 10,934 | 5,781 | 2,844 | 1,407 | 2,144 |
| Sirup—Gallons | 2,744,403 | | 1,902,955 | 2,078,011 | 1,454,108 | 1,531,000 | 1,824,127 | 1,567,318 | 1,705,220 |
| 1st Molasses | 3,925,239 | | 2,463,309 | 2,461,463 | 1,809,692 | 2,256,616 | 1,896,291 | 1,224,042 | 2,142,987 |
| 2nd Molasses | 1,630,870 | | 2,227,996 | 2,491,480 | 2,052,608 | 1,720,463 | 3,214,954 | 1,481,536 | 2,734,639 |
| Blackstrap | 10,832,639 | | 20,818,081 | 27,712,266 | 29,902,333 | 34,379,122 | 27,891,109 | 15,384,342 | 21,560,072 |
| Total Sugars | 211,955 | 242,384 | 340,892 | 383,513 | 400,115 | 488,631 | 436,862 | 239,095 | 322,243 |
| Tons of Cane Ground | | 3,163,901 | 4,179,645 | 4,942,525 | 5,295,268 | 5,909,846 | 5,128,321 | 2,978,516 | 4,021,903 |

[1] Does not include Cypremort.
[2] Grower-Processor Records.

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

# PRADAT & DOUGLAS

PUBLIC
WEIGHERS AND GAUGERS

237 NORTH PETERS STREET - - NEW ORLEANS, LA.
Phone MAin 1354

Prompt and accurate handlers of Sugar, Rice, Sisal, Nitrate of Soda; measuring logs and other commodities.

*We Specialize in Weighing of Cargoes*

# GAY, SULLIVAN & CO., Inc.

GENERAL COMMISSION MERCHANTS

207 N. PETERS STREET NEW ORLEANS, U. S. A.

CONSIGNMENTS SOLICITED OF

## Sugar Molasses Rice

SALES MADE FOR SHIPMENT DIRECT FROM PLANTATIONS

SOLICIT YOUR OFFERINGS OF

## Domestic and Foreign Sugars

Codes Used: Lieber's, Western Union and Others

Fertilizer and Merchandise } Departments Ask For Prices. { Cottonseed Meal, Tankage, Clover, Velvet Beans, Peas

**LAMBORN & COMPANY, INC.**
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

**LE BOURGEOIS BROKERAGE CO.**
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
**HARRY L. LAWS & CO., INC.**
Brokers and Distributors
SUGAR and MOLASSES
**SUGAR FUTURES**
American Bank Building New Orleans, La.

**GAY, SULLIVAN & CO., INC.**
SUGAR
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

**STAUFFER, ESHLEMAN & CO., LTD.**
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
**CYANAMID**
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

**INDUSTRIAL LUBRICANTS**

BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
**STANDARD OIL CO. OF LA.**

FOR SUGAR CANE FINANCING
**STATE AGRICULTURAL CREDIT CORPORATION, INC.**
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

**AMERICAN MOLASSES CO.**
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LEGARDEUR LLOYD R. MARKS
**R. J. LEGARDEUR & COMPANY**
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

**PENICK & FORD, LTD., INCORPORATED**
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

**STANDARD SUPPLY AND HARDWARE CO., INC.**
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

**E. A. RAINOLD, INC.**
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 20 NEW ORLEANS, LA., JULY 1, 1942 No. 19

# Release of New Sugar Cane Variety

**SUGAR CANE VARIETY CP 34-120, BY JOINT ACTION OF THE BUREAU OF PLANT INDUSTRY, UNITED STATES DEPARTMENT OF AGRICULTURE, THE LOUISIANA AGRICULTURAL EXPERIMENT STATION AND THE AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC., IS HEREBY RELEASED FOR COMMERCIAL PLANTINGS IN LOUISIANA THIS FALL.**

**THE PROCEDURE FOR RELEASE AND PROPER PRORATION OF THE SEED CANE TO THE LOUISIANA PLANTERS, THE APPLICATION FORMS AND THE TIME LIMIT DURING WHICH APPLICATIONS WILL BE RECEIVED FROM THE PLANTERS WILL APPEAR IN THE SUGAR BULLETIN OF AUGUST 1, 1942.**

In accordance with established procedure, the three cooperating agencies which are working together in the development of improved sugarcane varieties for Louisiana, viz., the Division of Sugar Plant Investigations of the Bureau of Plant Industry, United States Department of Agriculture, the Louisiana State Agricultural Experiment Station, and the American Sugar Cane League of the U.S.A., Inc., have jointly approved the release of C.P. 34/120 for commercial planting in the fall of 1942.

C.P. 34/120 compares favorably with Co. 281 in stalk diameter and has consistently surpassed Co. 281 in average weight per stalk. It has displayed fair stripping qualities and does not lodge readily, therefore its harvest by hand or mechanical means should not present any unusual problems. According to results of laboratory tests, it is intermediate between Co. 281 and C.P. 28/19 with respect to fiber content and milling qualities.

C.P. 34/120 has a good record of disease resistance. It has proved commercially resistant to red rot and root rot and had remained free of mosaic until this year when one diseased stool was found at Raceland. This offers no threat to the successful cultivation of the variety. Chlorotic streak has spread into healthy plots to a greater extent than noted in previous years but it can be controlled by roguing which has proved practicable with other susceptible varieties.

In agronomic tests, C.P. 34/120 has equaled or surpassed Co. 290 in yield of cane per acre and has surpassed Co. 281 in average indicated yield of sugar per ton of cane. It is a vigorous grower and has produced especially good stubble crops. It is believed that the variety will prove widely adaptable under Louisiana conditions.

*E. W. Brandes, Head Pathologist in Charge, Division Sugar Plant Investigations, U. S. Department of Agriculture.*

*W. G. Taggart, Director of Experiment Stations, State of Louisiana.*

*W. C. Kemper, President American Sugar Cane League of the U.S.A., Inc.*

THE
SUGAR BULLETIN
414 Whitney Bldg., New Orleans
Marcel J. Voorhies, Editor
Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
Subscription Price, 50 Cents per Year.

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE
President, W. C. Kemper, Franklin, La.
1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

EXECUTIVE COMMITTEE
W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

# The Government Explains and Interprets

*(By C. J. Bourg)*

The law which Congress passed earlier this year to control prices contains the specific restriction that the price of no agricultural commodity shall be held below 110% of parity as the result of a price ceiling on the product processed from such commodity. In the case of the price ceilings on sugar, the protests filed by producers of sugarcane, sugar beets and sugar having been dismissed on purely technical grounds, the only official documents available on the subject are the communications received by Congressman Hale Boggs of the 2nd Louisiana District in response to his inquiries as a Member of the Banking and Currency Committee of the House of Representatives. A letter from the Secretary of Agriculture explains the basis of arriving at parity on sugar beets and sugarcane. A memorandum from the Office of Price Administration explains their interpretation of the law in connection with the establishment of ceiling prices on sugar under the Emergency Price Control Act. In view of the length of these communications, only the more directly pertinent parts are hereinafter quoted.

The Secretary of Agriculture's letter deals with the determination of parity on sugar beets and sugarcane in the following manner:

"For many years, the Department has, in the case of sugarcane, confined itself to the publication of price and occasional parity data for that portion of the domestic crop produced in the continental United States. Planters in the State of Louisiana have been producing sugarcane in recent years sufficient to supply about 5.5 percent of the total annual distribution of sugar. It is noted, however, that the area contributing to the supply of domestic sugarcane is composed of the continental cane area (Louisiana and Florida), Hawaii, Puerto Rico, and the Virgin Islands, and that data are not now vailable for parts of this area.

"You will recall that the Agricultural Adjustment Act of 1933, as amended, provided for benefit payments to producers of domestic sugar beets and sugarcane in such amounts as the Secretary of Agriculture deemed fair and reasonable in view of the declared policy of Congress to reestablish prices to farmers at a level that would give agricultural commodities a purchasing power with respect to articles farmers buy, equivalent to the purchasing power of agricultural commodities in the base period. Production adjustment contracts developed under the Jones-Costigan amendment to the Agricultural Adjustment Act provided, in the case of sugar beets and continental sugarcane, for a government payment which, when added to the proceeds realized from the sale of the crop to processors, would result in a parity return to growers for the 1934 and 1935 crop seasons. Fair and reasonable payments made on the 1934 and 1935 crops of Hawaiian and Puerto Rican sugarcane did not require the computation of parity for these crops.

"In order to effectuate the policy set forth by Congress in that legislation and to calculate the government obligation under the production adjustment contracts employed in the domestic beet and continental sugarcane areas, the average index number of prices paid for commodities used by farmers in living and production for the calendar year used to designate the crop was multiplied by the base period average price of sugar beets and of continental sugarcane. The same procedure will be followed in determining the parity prices of domestic sugar beets and that part of the domestic sugarcane crop for which base period price data are now available.

"In conformity with this principle, the parity price of the 1941 crop of domestic sugar beets is $7.48 per ton ($5.50, average base period price x 1.36, average index number of the prices paid by farmers for commodities used in living and production, including interest and taxes, for the calendar year 1941). Likewise, the parity price of the portion of the 1941 crop of domestic sugarcane produced in Louisiana (assuming the domestic sugarcane area is not viewed as a unit) is $5.07 per ton computed by multiplying the base period value of $3.73 per ton for Louisiana cane by the index of 1.36.

"The existing sugar legislation was designed in part to effect a more equitable distribution of the total income available in the industry than had prevailed prior to its passage. The tax and conditional payment feature of the sugar program results in the return to growers of a larger share of the total sugar income than they would receive under the contractual arrangements characteristic of the industry. This feature of the legislation has been discussed on a number of occasions when sugar legislation has been under consideration. It is our position, in the light of this purpose, that the conditional payments must be considered as a part of the price received for domestic sugar beets and sugarcane. The Bureau of Agricultural Economics has been directed to include these payments as part of the total return received by the

producers of domestic sugar beets and sugarcane."

The figures in the above letter show that, on the basis of the 1941-calendar-year index of 1.36,

110% of parity for sugar beets is $8.23 per ton;

110% of parity for sugarcane is $5.58 per ton.

The parity index for the first five months of 1942 has been

| | |
|---|---|
| January | 1.46 |
| February | 1.47 |
| March | 1.50 |
| April | 1.51 |
| May | 1.52 |

The parity price of sugarcane and sugar beets after January 1, 1943, will be determined upon the average index for the calendar year 1942, according to the letter of the Secretary of Agriculture.

The OPA Administrator's memorandum deals with the interpretation of the Emergency Price Control Act as applicable to sugar (in addition to quotations from the law and discussions of legislative history), in the following manner:

### "The Relative Production and Number of Beet and Continental Cane Producers

"While continental cane has accounted for only about 6% of domestic consumption, sugar beets, which are all domestic, have accounted for about 23% of it. In the continental United States and its island possessions there are approximately 100,000 farms concerned with the production of sugar beets and sugar cane. Of this number 70,000 farms produce sugar beets, and they are all located in the continental United States. Of the remaining 30,000 farms, 15,000 produce sugar cane in the island possessions of the United States. The reason for the great preponderance in favor of sugar beets is the fact that sugar beets are produced almost exclusively on small family-sized farms. On the other hand, sugar cane is produced on extensive plantation-processor enterprises, particularly in Hawaii, Puerto Rico, and Florida.

"As far as the applications of parity tests are involved in subsection 3 (a), only continental producers can be considered. No parity has been determined and published by the Secretary of Agriculture for "offshore" producers.

### "Consequences of Employing Continental Cane Data

"Any rise in the ceiling of raw sugar would compel a corresponding rise in the ceiling on sugar refined from any source. Any rise due to using continental sugar cane data for the purposes of applying subsection (c) would not only give beet and "offshore" producers a wind-fall costly to consumers, but would also benefit foreign producers at the expense of the Government and the American people. The continental cane producers have been growing about one-sixteenth of our domestic consumption of sugar. They may grow one-twelfth of our reduced supply this year. In order to give them a premium over parity, it seems extravagant to extract from the Government and from the consuming public twelve times the money required and to misdirect eleven-twelfths of this money. The existing ceiling is high enough to reflect a beet sugar price above each of the four standards of section 3 (a). Parity computed on continental cane would call for raw sugar prices of about 4.45 cents per pound duty paid cost and freight basis New York, higher than the existing ceiling by about seventy-one cents per one hundred pounds, or $14.20 a short ton. Assuming an annual consumption of five million tons, this would raise the consumption bill by $71,000,000.

"The continental cane producers and processors who would force this rise would obtain perhaps $6,000,000 of it. The balance of $65,000,000 would only go to swell the profits of others having no claim whatever to preferment.

"The $65,000,000 as well as the $6,000,000 would go to burden the Government and the people. Many millions of these sums would be added to the cost of manufactured products using sugar and tend to increase the prices of such products by the amount of those millions plus percentages for financing, selling, and administrative overhead. Other millions would directly add to the domestic consumers' cost of living and tend to increase pressures to raise wages. Other millions would increase the expenses of the United States Government as a consumer. From the point of view of our overall ceiling, this might be fatal.

"The price of blackstrap molasses is determined by the price of its sugar content. This rise would, it is estimated, besides adding $10,000,000 to the molasses bill of other consumers, cost the Government (which takes 60 per cent of the crop as a source of industrial alcohol used in explosives) another $15,000,000. These sums are in addition to the $71,000,000 rise in sugar costs, bringing the total direct increases in the costs of sugar and molasses close to $100,000,000—without taking any account of the indirect costs due to the reflection of increased living costs into wages and thence into the costs of other commodities. These increases in costs to the Government must result either in further taxes adding to production costs and to the cost of living or in increases in the Government deficit, which threatens to undermine the value of the dollar.

### "Government Payments

"Government payments to sugar cane and sugar beet producers have of course been included in testing the present maximum prices under Section 3."

* * * * *

"If sugar prices were to be set at levels which would reflect to the producers prices prescribed by subsection 3(a), without taking any account of the Government benefit payments under the Sugar Act of 1937, the sugar legislation would provide an unjustifiable addition to the ten per cent premium above parity set forth in subsection 3(a)(1) of the Price Control Act. Such a program would cast doubt upon the intelligibility of the policy of the Sugar Act as well as call for a strained construction of the Price Control Act. The entire structure of the Sugar Act evinces a purpose to promote the production of an adequate supply of sugar without passing on to the consumer the burden of such a program. The contrary construction would pass on to the consumer the full cost of benefit payments to the producer. Indeed, it would necessitate the payment of raised prices for sugar produced from foreign cane and thus pass on to the consumer a further increased burden corresponding to no benefit to the favored class of domestic producers. Government payments are accordingly included in determining the price for sugar beets required by section 3(a).

"The Sugar Act was passed upon the assumption that sugar producers needed government help to keep production upon a sound basis. It was not intended to confer upon them an unearned reward in excess of the standard of prosperity represented by the application of the tests of subsection 3(a) without the inclusion of government payments.

### "The Price Tests of Section 3(a)

"The Department of Agriculture has determined and published the following figures:

Test (1) 110 per cent of parity—$8.23[1]

Test (2) Market price on October 1, 1941—none. (Contracts cover the whole of an annual crop. There are no general spot or futures markets.)

Test (3) Market price on December 15, 1941—none. (See test (2) supra.)

Test (4) The average price during the period July 1, 1919—June 30, 1929—$8.34.[2]

"Part 1334 (Federal Register, Title 32, Chapter XI) specifies a maximum price for sugar of $5.45 per one hundred pounds which, upon the customary differential, establishes a price of $5.35 per one hundred pounds for beet sugar. This corresponds to a beet price of $8.79 per ton.

"Part 1334, therefore, complies with Section 3 of the Act.

### "Part 1334 Specifies Fair and Equitable Maximum Prices

"The specified maximum prices for raw sugar give effect to about 94 per cent of the rise which occurred during the period from January 1, 1941, to August 14, 1941,[3] when the first ceiling was imposed. No such rise was to be accounted for by any known or reasonably conceivable increase in production costs. It represented a reasonable speculative discounting of the sort of possibilities connected with the war which have actually come to pass. No increase in production costs of raw sugar proportionate to this increase of price is apparent.

"The chief increase in the cost of refined sugar has been due to this rise of raw prices. Refiners voluntarily reduced their prices by ten cents in the fall of 1941, after they had worked off inventories accumulated at prices above the August ceiling of $3.50. The twenty cent raise in the ceiling on refined sugar, allowed upon the rise of twenty-four cents in maximum prices for raw, was determined by giving consideration to refiners' margins and refiners' costs and was accepted by the refiners."

* * * * *

### "Conclusion

"The maximum prices established by Part 1334 are fair and equitable and consistent with the limitations contained in Section 3 of the Emergency Price Control Act of 1942."

---

[1]Computed as follows: Prices during base period (1909-1914)—$5.50 Average index for 1941—136. $5.50x 1.36x1.10=$8.23

[2]Average of the 1919-1928 crops, which come within this period.

[3]The original ceiling allowed only 60 cents of a 90 cent rise during the above-mentioned period (from $2.90 to $3.80), but a subsequent rise of 24 cents was necessitated by the price at which the government purchased the Cuban sugar crop.

---

# Some Notes on Sugar

*Lamborn & Company, Inc.*

Our mails are so congested with inquiries about the various phases of the sugar situation that we find it necessary to use this means of presenting our thoughts on the component parts of the sugar picture. The varied sugar problems of the Nation today have many ramifications. The sugar situation can only be appraised by a proper consideration of all of them.

### Sucrose or Ersatz

On our desk we have a carton of saccharine, a coal tar derivative of no food value. Each packet contains one dram of saccharine. Each packet has on it the legend "Sweetening agent for pickling—approximately 500 times sweeter than sugar." As a matter of fact, we have observed for some time, with misgiving, the number of substitutes being recommended for *Sucrose*.

From time immemorial, man has attempted to replace the genuine with cheap and ineffective imitations. In all cases, man pays a price for the use of substitutes, but this is especially true when a substitute such as saccharine is used to replace a food like sugar. After all, the fact that sugar is sweet is incidental. We consume sugar primarily because the body craves its *energy-giving* value. Since we secure from a pound of sugar 1,815 calories, it is the cheapest food, on a calory basis, on the American market today.

We decry the promotion of any substitute for *Sucrose* at a time when *full-powered energy* is more requisite than ever because of our war efforts. In connection with saccharine, P. B. Dunbar, Food & Drug Administration, has wired us as follows:

> "Retel eleventh since Saccharin has no food value interstate shipments foods containing it are regarded as in violation of Federal Food Drug and Cosmetic Act. Only exceptions are foods for special dietary use which must be labelled as provided in regulations under Section 403J of Act. Use of Saccharin by householders not subject to Federal Act but believe it highly undesirable from nutritional standpoint."

It should be noted that already in many restaurants throughout the United States, saccharine is being served for use in coffee and tea. This also is the case in certain railroad dining cars.

### Energy

Speaking of the food and energy value of sugar, we have become alarmed, in reading the newspapers, to note that the housewife's pages are replete with suggestions on how one may do without sugar. Recipes now call for either the elimination of sugar, the reduction of its use, or the utilization of substitutes. This situation, added to the reduction in the industrial users' supply to a 70% basis, will, verily, soon put us in a sub-normal per capita consumption position on sugar. The driving, leading nations of the world are generally those which have been high in their per capita sugar consumption. Normally, England, Australia and the United States consume annually over 100 pounds of sugar per capita. Italy's per capita consumption runs approximately around 21 pounds.

It behooves us so to handle our sugar situation that the public will not be misguided in its need for sugar and led into the use of substitutes of a deleterious nature. It cannot be argued that the social butterflies who indulge in no exercise, need as much sugar as the workers in the mills, the mines and the fields. We hold no brief for the former, for they toil not and neither do they spin.

We all must be vitally interested in those people who are freely dispensing energy in their daily tasks, not only in the maintenance of the home front, but more particularly in the work of producing implements of war for our armed forces. Also a word for the children of the nation—can anyone question their great need for a *Constant* replenishment of energy?

In connection with energy, we know that 35 to 40% of the consumption of sugar in the United States is through commercially manufactured products. Take for example candy, particularly the 5c package. There, indeed, we have an "energy package". It is ideal for

the laboring man, working in the factories, in the shipyards, etc. It is easily obtained, easily carried and easily transformed into *energy*. It is one of the means to re-energize the human body quickly. And a candy bar made of *Sucrose* has the utmost strength and *energy-giving* power. Ice creams, preserved foods, bottled drinks, cakes, cookies and any number of other processed foods are in a similar category. The public is educated to get its energy through these means.

Dame Nature wisely gave this great food, *Sucrose,* a palatable and delectable taste so that we humans would be tempted to consume enough of it in order to get the proper amount of nutrition.

Incidentally, we become provoked when we hear it said that sugar and products made from sugar are bad for the teeth of children and adults. Leading dental authorities state that the common cause of tooth decay is neglect of the teeth. Eliminate sugar completely from the diet and there still will be bad teeth if they are not given proper and consistent care.

In connection with sugar as a vital necessity, it is interesting to note that Alexander Werth in his current popular work "Moscow War Diary" has the following to say:

> "I wonder if foodstuffs are also going to be supplied to the Soviet Union. What about sugar, 'the nerve of war'? It's running short in Moscow (though we, as privileged foreigners, don't suffer from any serious shortage yet); but it is sure to get hopelessly short when the present supplies run out —and with no more to come from Vinnitze, Poltava, etc."

It is also interesting to note that Paul V. McNutt in a recent speech urged that this country adopt the British system of providing nutritious low-cost food for workers as a matter of national policy in order to increase war production and working efficiency and to decrease accidents and absences from work. Mr. McNutt called it "folly to neglect the diet of industrial workers in war time". He spoke of food as a "tool of War". He mentioned that longer working hours, speed-up of work, insufficient rest, the extremes of temperatures to which workers are frequently exposed all help to increase energy consumption and raise the body's nutrition requirements, and that eating the right food may be translated into greater working efficiency, fewer absences and a decrease in accidents.

The speed-up in the shipyards, and tank and armament factories is terrific. Sugar contributes as no other food to that *speed-up.* The hardworking public must get their carbohydrates in the form of sugar in order to maintain their morale as well as their health.

England, in her darkest hour of this war, has always done her utmost to maintain the sugar ration at the highest possible point. Sugar ships entered England when she bitterly needed ammunition and other implements of war. This in the face of the heaviest possible attacks by Germany on her convoys. England has felt so strongly on this subject that she is giving sugar "bonuses" during certain periods of the year. It cannot be denied that the home front is as important as the battle front when health and morale are involved. In this case there is the question "Which comes first the hen or the egg"?

## Home Canning and Preserving

Some liberalization in the amount of *Sucrose* available for canning and preserving has been made. Our reports, however, indicate with a great degree of finality that the housewives generally will not bestir themselves to the extent desired in making use of such restricted privileges as have been given them for home canning because (a) too much red tape has to be gone through to secure permission to buy the extra allotment and (b) the average housewife has been accustomed to can and preserve with a larger proportion of sugar than that now permitted. Many of them are fearful that their pack may spoil and they do not want to run the risk of loss of time and money.

As for home preserving, a large percentage of our small fruits and berries are ordinarily put up in the form of jams and jellies. The present allowable sugar ration will permit little of this to be done. We think this situation is regrettable from several standpoints. Already many thousands of dollars worth of strawberries have gone to rot and many other small fruits and berries will go the same way. Since production is wealth, it is an awful thing to witness its destruction when it can be avoided.

The Army and the Navy are requisitioning large percentages of the commercial canners' and preservers' packs. This leaves less of all pack for the civilian populace. This is one year, of all years, when household canning and preserving should be at the very maximum. Obviously, everything should and must be done to encourage the housewives to this end and all obstacles to the accomplishment of such a program should be broken down as much and as quickly as possible. Home canning and preserving not accomplished in May, June, July, August and September is gone with the wind. This loss of food can never be recovered.

## Hospitals

It is our opinion that there should be no restriction on the use of sugar in hospitals, even though some of the rest of the civilian populace is obliged to go without. Patients on their backs, recuperating, must have the energy from sugar.

## Red Cross and Canteens

We believe that there should be no restriction in connection with sugar consumption in those two categories, for obvious reasons.

## Shipping

The shipping situation continues unsatisfactory but with indications from Washington that as time goes on the Caribbean will be freed of the submarine menace. Secretary Knox in an interview the other day indicated that the American waters were now being well protected in a strip 50 miles wide along the coast line. Furthermore, convoying is on the increase. Many ships are being used in the sugar trade that are unsuitable for long hauls for Army or Navy purposes. The prospects in connection with the movements of sugar by barges from Cuba are much brighter. It is believed that within a month or so the actual movement by barges will start. It is our opinion that the movement from Cuba and Puerto Rico during the past month or so has been quite good, under the circumstances.

## Public Warehouses

There is a dearth of public warehouse space in the United States. This will become more acute as time goes on. The Army and Navy are finding it necessary to displace civlian supplies with war supplies in public warehouses. The prospects, then, of handling in public warehouses more sugar than that already stored, are not bright, indicating that if we are to

handle our surplus of sugar, some new systems will have to be found.

### Railroad Equipment

Every indication leads us to believe that, in the near future, empty freight cars will be as scarce as hens' teeth and that the transportation facilities will be taxed to an alarming degree. All of this further indicates the necessity of establishing a system whereby sugar can be moved while the moving is good, and that the burden of carrying such sugars must be shared by the wholesale grocers, chain store organizations, retail grocers, industrial users, etc., as has been the custom and necessity in the past.

### Insular Areas

Cuba, Puerto Rico and Hawaii are virtually one crop countries. They all have large sugar crops this year. The problem has been to move these crops and it is understandable that this is a grave and difficult one. As we see it, however, it is a problem that *must* be met, for without the movement of their sugar crops the economy of these islands is faced with disaster. Press reports from Havana state that Cuba is becoming quite fearful of her future economy if some encouragement cannot be given to her that her current crop will be moved by the end of the year. The Hawaiian picture is today the most encouraging of all, since we believe that the prospects are bright for the movement of the major portion of her crop. Transports going into the Pacific can stop and pick up Hawaii's sugar on the return trip. If the crops of insular sugar supply areas are moved, then there arises the problem of what to do with those crops when they get here.

### New Tariffs

With the reduction of the tariff on Peruvian sugars —.93¾c versus 1.87½c—prospects of securing sugar from that area are improved. Not only that, but many other nations automatically benefit duty-wise under the "most favored nation" clause and may market their sugar in the United States. For example, Mexico, which has a production over and above her own needs, may desire to dispose of her surplus in the United States on the .93¾c tariff. We understand applications have already been made for reductions in rail freight rates from Mexico to certain points in the United States. Although many of the favored nations may not be able to get much of their supplies to us because of the scarcity of ships, Mexico is contiguous to the United States and her produce can readily flow here. Furthermore, these new sources must be taken into consideration in the promising sugar supply picture for 1943.

### New Crops

It is necessary not only to plan what to do with 1942 availables but to begin to ponder on what to do with 1943 new crop supplies, especially since it is apparent that under the present rationing schedule we will end this year with unwieldy stocks of sugar within the borders of the United States. These stocks will have proved tremendously costly in the matter of warehousing and carrying charges. The prospects are, in fact, such as to indicate that 1943 well may be one of the most competitive years in sugar that we have ever witnessed. Sugar, although not, strictly speaking, classified as a perishable product, nevertheless loses quality and value if kept too long in storage. Refined sugar becomes caked and warehouse-set; raw sugar falls off in weight.

### Beet Distribution

On January 1st of this year we had on hand in this country approximately 1,390,000 short tons of old crop beet sugars. The distribution to date has been most discouraging. Well over 50% of this inventory is still on hand. It is being distributed at a snail's pace. Harvesting of new crop beets starts in California in July and production of beet sugar will be at the peak in October-November throughout the United States. This new crop may well run near the 2,000,000 ton mark. It is evident, then, that new crop arrivals will prove to be embarrassing from the standpoint that it will be difficult to find outlets for these sugars unless some important change is made in the handling of sugar and especially now. The beet sugar industry generally has not the private storage capacity for all of the new crop production. This is markedly the case when the industry may have a large part of its old crop sugars in its warehouses at the time new crop is being made. This will increase the problem of farmers and processors.

### Economy of Storage

With private warehousing at a premium, eventually it will be found that there is only one way to store reserves of sugar:

(a) in increased home canning and preserving
(b) in increased commercial canning
(c) in increased use by industrial users
(d) in increased inventories by those in the trade.

### The Public

We in the United States are engaged in a fight for survival. We all know that many vital commodities must be rationed and that the public must make great sacrifices. If time proves that the present stringent regulations on sugar rationing are not necessary then there will be a revulsion of feeling on the part of the public on rationing in general. There will not be in that case the same degree of enthusiastic, patriotic interest in the matter of co-operating on vital necessities such as rubber, tin, etc., as is to be desired and as is necessary. To the contrary, a disillusioned public is something the Administration obviously must avoid.

LAMBORN & COMPANY, INC.
Ody H. Lamborn

June 12, 1942.

---

# President Wallace C. Kemper Appointed a Member of the Louisiana Salvage for Victory Council

*(President Kemper writes the following letter to the members of the American Sugar Cane League)*

Gentlemen:

As President of the American Sugar Cane League, I have been appointed a member of the LOUISIANA SALVAGE FOR VICTORY COUNCIL. I take both industry and personal pride in this because I feel that our organization, collectively and individually, desires to make every possible contribution to the ALL OUT WAR EFFORT. It is an effort which enhances unity of action, which we so sorely need and so fervently want.

The LOUISIANA SALVAGE FOR VICTORY COUNCIL is presently endeavoring to enlist the active participation of *ALL* Louisianians, men, women and children, in the RUBBER SALVAGE PROGRAM proclaimed by the President of the United States.

May I urge you to develop a salvage complex and induce your friends and neighbors to follow your example with respect to all articles containing rub-

ber? Collect old and discarded rubber items around your home, yard, and place of business.

Acceptable scrap rubber includes tires of any kind, rubber tubes, patches, boots, reliners, old rubber boots, shoes, soles, heels, hot water bottles, rubber gloves, rubberized clothing, bathing caps, and a multitude of miscellaneous items like rubber mats, hose, jar rings, fly swatters, rubber stamps, pads, and so forth.

Remove from the collection of old rubber all wood, iron, leather and cloth and then deliver the old rubber to your nearest filling station. The oil companies are cooperating in this great patriotic program.

I know that you will gladly do all in your power to see that *every* available piece of rubber is started on its way to real usefulness and to make its contribution to the ALL OUT WAR EFFORT.

With kind regards, I am

Yours very truly,
W. C. Kemper
President

## United States Department of Agriculture

*(Agricultural Adjustment Administration, University Station, Baton Rouge, Louisiana)*

June 5, 1942

To: Parish Administrative Officers and County Committeemen in Sugarcane for Sugar Parishes

Subject: Proof of Age of High School Students employed on Sugarcane Farms under the Student Emergency Farm Labor Program—Reference, Supplement 1, USDA War Board Letter No. 43.

The question has been asked whether, in view of the time required by the Children's Bureau to obtain the documentary requirements necessary for the issuance of Proof of Age Cards, a registration certificate such as will be filled in by students under the Student Emergency Farm Labor Survey would be acceptable proof of age.

As you know Proof of Age Cards issued by the Children's Bureau of the Department of Labor have been considered adequate proof in the past because such cards were only issued after documentary proof such as a Birth certificate, Baptismal certificate, Bible record, Insurance Policy at least a year old, or some other documentary proof of age, was presented with the application. We are reminded by the Sugar Agency that it is the responsibility of the County Committee to determine what constitutes adequate proof of age and that it does not wish to authorize any relaxation from the documentary requirements established by the Children's Bureau. However, it feels that there is no objection to the County Committee accepting a certificate similar to the one given below in the absence of more satisfactory proof, provided that it contains a certifying clause similar to the one given signed by the teacher.

**Student Emergency Farm Labor Survey**

..... Parish

Name of School.....

Date.....1942

Name .....

Address .....

Phone No..... Age..... Sex..... Height

..... Weight..... Date of Birth.....
Mo. Date Year

Will you continue school in this Parish this fall?.....

Have you had experience in farm work?..... If the answer is YES, specify type of work performed.

.....

Describe physical defects, if any.....

.....

.....
Signature of Student

I hereby certify that the age given above corresponds with the age given on our school record.

.....
Signature of Teacher

You are reminded that it is the responsibilty of the producer to furnish satisfactory proof of age for any child whose age is questioned by the County Committee, and he should therefore have in his possession for each child employed by him a Proof of Age Card issued by the Children's Bureau or a copy of the above registration card properly certified by the teacher.

G. J. Durbin
Administrative Officer In Charge

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

**LAMBORN & COMPANY, INC.**
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

**LE BOURGEOIS BROKERAGE CO.**
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
**HARRY L. LAWS & CO., Inc.**
Brokers and Distributors
SUGAR and MOLASSES
**SUGAR FUTURES**
American Bank Building New Orleans, La.

**GAY, SULLIVAN & CO., INC.**
SUGAR
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

**STAUFFER, ESHLEMAN & CO., LTD.**
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
**CYANAMID**
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

**INDUSTRIAL LUBRICANTS**

BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
**STANDARD OIL CO. OF LA.**

FOR SUGAR CANE FINANCING
STATE AGRICULTURAL CREDIT CORPORATION, INC.
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

**AMERICAN MOLASSES CO.**
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LeGardeur Lloyd R. Marks
**R. J. LEGARDEUR & COMPANY**
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

**PENICK & FORD, LTD., INCORPORATED**
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

**STANDARD SUPPLY AND HARDWARE CO., INC.**
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

**E. A. RAINOLD, INC.**
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

CHEM. LIBRARY

THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

Mrs. Grace Amer. Librarian Louisiana State University, La

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 20 NEW ORLEANS, LA., JULY 15, 1942 No. 20

# Price Control and Louisiana Sugar

*(By C. J. Bourg)*

When the Louisiana sugar harvest season began in October 1941, Price Schedule No. 16 was in effect, establishing the price of raw sugar at $3.48 New Orleans basis. There was no ceiling on direct consumption sugar until December 20, 1941. Negotiations were under way from September on for the purchase of the 1942 Cuban crop. The attention of the Price Administrator was directed to the open demands that were being made by Cubans for a higher ceiling price on raw sugar.

When it became apparent that a large part of the Louisiana crop would have to be marketed under the existing price, the Administrator was requested at the beginning of the harvest season to make a determination of the expected new price in time to permit Louisiana producers of raw sugar and sugarcane to enjoy the benefits on the whole crop. As matters turned out, the ceiling price of raw sugar was increased to $3.73 New Orleans basis as of January 5, 1942. Areas like Cuba and Puerto Rico began production in January and secured the full benefit of the price increase. Other areas have marketed the greatest proportion of their 1941 crop at the improved price for cane and beet sugar. Louisiana participated least.

Amendments to schedule 16 permitted average prices for raw sugar and sugarcane, on a limited basis, but this granted only partial enjoyment. Louisiana is now approaching the harvest season of 1942 with a similar situation in prospect. It is expected that the 1943 Cuban crop will be purchased by the U.S.A.; although negotiations have not begun. The Cubans have complained about the low price at which they sold the 1942 crop and have announced their intention of demanding a better price. In a memorandum prepared and released by OPA, it is stated, "a subsequent rise of 24c was necessitated by the price at which the Government purchased the Cuban sugar crop." Thus OPA admits that the ceiling price of raw sugar was determined on the basis of the purchase price of the Cuban crop, as will probably be the case again.

Under the present price ceiling for raw sugar, Louisiana producers are not receiving 110% of parity as provided in the Emergency Price Control Act. In fact, sugarcane growers do not receive 100% of parity on the basis of the present raw sugar ceiling. The OPA has announced that with regard to sugar, Section 3 of the Act is interpreted as being satisfied when a majority of the growers of sugar beet and sugarcane in Continental United States receive 110% of parity. It has been figured that the present price of beet sugar reflects 110% of parity for beet growers. This decision is contrary to the understanding expressed by Senator Ellender and Senator Brown at the time that the conference report on the Price Control Bill was being considered in the Senate, as shown by the Congressional Record at page 743, January 27, 1942.

The determination of parity for sugar beets has been figured on the basis of the index average for the calendar year 1941, which was 136. For each month in 1942 up to date, the index has risen, to-wit: January 146, February 147, March 150, April 151, and May 152. Obviously the parity determination covering the 1942 crop will have to await the expiration of the calendar year 1942, even though, in the case of Louisiana, more than one-half of the crop is normally sold before January 1st each year.

In addition it is probable that negotiations for the Cuban crop will again be continued until January when production begins in Cuba.

Therefore, from the standpoint of the protection afforded sugarcane and sugar beet growers under Section 3, and from the standpoint of the admitted controlling effect of the purchase price of the Cuban crop upon the raw sugar price ceiling, Louisiana producers

THE
SUGAR BULLETIN

414 Whitney Bldg., New Orleans

Marcel J. Voorhies, Editor

Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
Subscription Price, 50 Cents per Year.

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE

**President, W. C. Kemper, Franklin, La.**

1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

EXECUTIVE COMMITTEE

W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

are without assurances that they will be permitted to receive the prices to which they are entitled.

The industry is not yet prepared to make proposals regarding the 1942 crop, but the producers would be interested to know whether the OPA will offer a program after discussing the details with the industry; having in view an arrangement whereby the Louisiana sugar industry may be given full protection under the law, including all advantages that may be made available to producers in other areas.

## Changes in Rationing Regulations

The latest statements from OPA with regard to rationing indicate a partial liberalization with respect to sugar, as shown by the following:

A two-pound extra ration of sugar will be released to consumers on their sugar ration stamp No. 7 beginning July 10, it was announced by Price Administrator Leon Henderson. An extra quantity will also be made available to industrial and institutional users as an increase in their July and August allotment, Mr. Henderson said.

The extra sugar ration, the price administrator said, is made possible by receipt of somewhat heavier shipments from the off-shore producing areas than were anticipated when the present ration allotments were fixed. He said it is not possible to give assurance regarding the continuing basic ration allotment, however, because of lack of any assurance that the shipping situation will remain as favorable as it has been in the past two or three months.

Mr. Henderson's decision was reached after consultation with shipping officials and after the Division of Industry Operations of the War Production Board had determined that the quantity of sugar available for distribution to civilian consumers between July 1 and December 31, 1942 would be 3,435,000 short tons.

"With American shipping facing such perils as enemy submarine activities and mine-sowing, nobody knows whether we can bring in sufficient sugar to maintain our present ration levels in 1943," Mr. Henderson said. "But the shipping prospects, together with the amount of sugar now on hand, we feel warrant distribution of at least 200,000 tons at this time. If our present shipping situation continues, it will result in no shortage. We're taking what I'd call a conservative gamble."

Actual distribution of the extra sugar ration will entail no red tape, the OPA said. For the individual consumer, it simply means cashing in coupon No. 7 of the ration book at any time between July 10 and August 22. The No. 7 coupon will entitle him to buy the two extra pounds, without any effect whatever on any other coupons in the book. (See amendment 3 below, about coupons 5 and 6).

Likewise, there will be complete absence of any red tape for industrial and institutional users. When they apply for their regular sugar allotments for use in September and October, which they may do on or after August 15, they simply will get this extra allowance of sugar above their regular allotment.

While the extra sugar for these two classes of users does not actually become available until August 15, OPA said, institutions and industrial consumers may step up their rate of consumption immediately in anticipation of the forthcoming increase.

Institutional users, such as restaurants, hospitals, etc., will receive 75 per cent of their normal needs, instead of 50 per cent as regularly allowed, and industrial users will receive 80 per cent of their normal requirements instead of 70 per cent as heretofore. The extra allotment, however, is for the one allotment period only.

In no case, is there any reason for anyone to go to the local rationing boards to get this additional allowance, OPA said. "The rationing boards are extremely busy with other important matters, and to go to them would be a needless additional burden on their already overtaxed facilities," the OPA said.

TITLE 32—NATIONAL DEFENSE
CHAPTER XI—OFFICE OF PRICE ADMINISTRATION
Part 1407—Rationing of Food and Food Products
AMENDMENT No. 3 To RATIONING ORDER No. 3—SUGAR RATIONING REGULATIONS

Paragraph (b) of Section 1407.86 and Section 1407.88 are amended, two items are added to Section 1407.243, and a new paragraph (c) is added to Section 1407.222, as set forth below:

INSTITUTIONAL AND INDUSTRIAL USERS

1407.86 Allotments.—

* * * * *

(b) Application for an allotment made during the registration period shall be for the period from the date of registration to June 30, 1942. All subsequent applications shall be for consecutive two month periods, the first of which shall commence on July 1, 1942. Applications shall be made not later than the 5th day of the first month of the period for which the application is being made and not earlier than the 15th day of the month preceding the period. The Board, however, to prevent loss of fresh fruits, vege-

tables, eggs, or dairy products, or for other purposes authorized by the Office of Price Administration, may permit the application to be made at any time during the month preceding such period and in such cases may permit the application to be made for a period not to exceed one additional month. The Board, in its discretion, may permit an application to be made at any time after the time specified herein, but in such case the Board shall reduce the allotment by the amount allocable to the expired portion of the period, in the proportion which the number of days which have elapsed bears to the total number of days in the period.

1407.88 *Application for Certificate.*—Registering units which have properly registered on OPA Form No. R-310 (Registration of Institutional and Industrial Users may apply for a provisional allowance or allotment on OPA Form No. R-314 (Application for Sugar Purchase Certificates by Institutional and Industrial Users). The application shall be signed by one of the persons authorized to file and sign OPA Form No. R-310 or by an agent designated by the owner by a written authorization filed with the Board. The application shall be presented at or mailed to the office of the Board having jurisdiction over the registering unit.

SCHEDULES

1407.243 *Schedule C: Designation of ration periods and weight value of Stamp valid therein.*

| Ration period | Stamp valid during ration period | Weight value of Stamp |
|---|---|---|
| No. 5 (June 28 to July 25, 1942) | Stamp No. 5 | 2 pounds |
| No. 6 (July 26 to Aug. 22, 1942) | Stamp No. 6 | 2 pounds |

EFFECTIVE DATE

1407.222 *Effective dates of Amendments.*—

* * * * *

(c) Amendment No. 3 (Sections 1407.86(b), 1407.88 and 1407.243) to Rationing Order No. 3 shall become effective June 20, 1942.

(Pub. Law 421, 77th Cong. 2d Sess., WPB Dir. No. 1 and Supp. Dir. No. 1 E).

/s/ Leon Henderson
Administrator

Issued the 19th day of June, 1942.

The Office of Price Administration today authorized State OPA directors to grant increased allotments of sugar to food manufacturers whenever in their judgment it is necessary to avoid waste of fresh fruits and vegetables.

Because of greatly increased acreage, which was planted to meet wartime needs, OPA said that additional allotments of sugar might be necessary—in certain instances—to prevent waste of this increased production.

Before granting petitions, State directors were advised by OPA to make certain that the sugar content of a product cannot be reduced.

State directors were also told to consider the possibility of other uses of the fresh fruits and vegetables, in which additional sugar is not necessary; and the amount of sugar, if any, an applicant can shift from some other product not now manufactured because of container limitations.

The problem of inadequate sugar arises only with respect to products for which a percentage allotment is provided, such as tomato catsup, soup, and preserves, but not in connection with products for which provisional allowances are made, such as all types of canned fruit.

Sugar obtained on this new basis, which is used in products manufactured for government delivery, is not replaceable to the manufacturer as is the amount of his regular rationing allowance which he uses in products manufactured for the government.

Industrial users may file their applications for increased allowances for the purpose of conserving fresh fruits and vegetables on OPA Form No. R-315 at the Local War Price and Rationing Boards. The boards will attach recommendations to each application, and forward them to the offices of the State directors.

If an industrial user does not manufacture all of the fresh fruits and vegetables he sets forth in his application, he must deduct the unused amount of sugar from his regular allotment, the OPA said.

## Tires for the Farmers

Discussions with officials in charge of tire rationing in OPA lead to the recommendation that all farmers should immediately examine the tires on their automobiles, trucks, or farm implements to determine whether the tires will need recapping. No farmer should wait until the grinding season; but, if he finds that his tires are worn, he should contact his local Tire Rationing Board. It is a good idea for each farmer to know the men who are serving on his local Board. If you expect that you will need recapping for your tires, then you should ask immediately about the procedure to make sure that you can obtain delivery of the recapped tires in time for the planting and harvesting operations.

The following are questions and answers prepared by OPA for the information of farmers:

1. Q. How often should I air my tires?

A. Passenger Car—Once a week.

Trucks—local or short hauls—at least twice weekly or preferably daily.

Trucks—long distance—high speed service—daily and before starting each trip.

2. Should I increase my inflation pressure in order to secure better wear?

A. Air pressure should be maintained according to the tire or car manufacturer's official recommendation for the particular model or size of car, or truck and tire size. The important thing is to maintain the recommended air pressure at all times.

3. Q. What effect will under-inflation have on my tire mileage?

A. A considerable drop in tire mileage can be expected with under-inflation. If under recommended inflation 30,000 miles were secured on tires, the following mileage might be expected for lower than recommended inflation:

| % Under-inflation | % Loss in Mileage | Relative Mileage |
|---|---|---|
| At recommended inflation | | |
| 10 | 0 | 30,000 |
| 20 | 5% | 28,500 |
| 30 | 16% | 25,200 |
| 40 | 33% | 20,100 |
| 50 | 57% | 12,900 |
| | 78% | 6,600 |

4. Q. How long will a recap last as compared with a new tire?

A. 60% to 80% of new tire mileage is often obtained on recaps made of present quality material. The amount of mileage which a recap will give will be dependent upon the quality of material used and the skill of the man doing the work.

5. Q. How many times can my tires be recapped?

A. This depends entirely on the condition of the carcass. Many persons have reported 3 to 4 recaps to one carcass when used in easy service. Let a reputable retreader determine whether the carcass is fit for another recap.

6. Q. Should I interchange my tires from one wheel to another, and how often?

A. Interchanging wheel positions of tires will aid in securing more even tread wear. Uneven tread wear means fast tread wear. It is usually found desirable to make such interchange at intervals of from 3,000 to 5,000 miles. The first interchange after new tires have been applied is the most important one.

7. Q. How can I make my tires last longer?

A. One of the most effective means is to reduce your driving speeds. As speed increases, the number of flexes per minute in the tire also increases. The more rapidly a tire flexes, the greater the build up of heat. As higher temperatures are reached, tread rubber softens and wears off faster. This makes high speed during warm or hot weather especially hard on tread wear. If 30,000 miles is assumed normal tire mileage, at 35 miles per hour, the following decreases in tire mileage with increase in speed can be expected:

| Speed in M.P.H. | % Decrease in Tire Mileage | Relative Tire Mileage |
|---|---|---|
| 35 | 0 | 30,000 |
| 40 | 12% | 26,400 |
| 45 | 22% | 24,400 |
| 50 | 33% | 20,100 |
| 55 | 45% | 16,500 |

Note there is a differential of 13,500 miles between the mileage expectancy at 55 miles per hour and 35 miles per hour. This is equivalent to as many miles as some persons drive in two years—in other words, there is a possibility of making your tires last two years longer by reducing your speed, if you have been accustomed to maintaining 55 miles per hour.

8. Q. Are there any other ways I can increase my tire mileage?

A. Yes. Don't make "jack rabbit" starts.

Don't make quick stops.

Take turns slowly.

Don't overload your tires. Overloading your tires causes fast wear by increasing the load per square inch of contact area. It may also cause premature failures due to blowouts due to excessive flexing.

The relative effect of overloading may be seen from the following table.

| % Overload | % Decrease in Tire Mileage | Relative Mileage |
|---|---|---|
| Recommended load | — | 30,000 |
| 10% | 18% | 24,600 |
| 20% | 30% | 21,000 |
| 30% | 42% | 17,400 |
| 40% | 52% | 14,400 |
| 50% | 60% | 12,000 |

You can readily see that you do not profit by overloading.

# Milling Tests of Promising Unreleased Varieties of Sugar

*(By Arceneaux, George, Agronomist, and Davidson, L. G., Assistant Chemist, Division of Sugar Plant Investigations, Bureau of Plant Industry, United States Department of Agriculture)*

Sugarcane seedlings now being bred differ greatly among themselves with respect to percentage of extractable juice, fiber content, and other factors affecting millability; thus information as to milling properties is considered important in arriving at the fundamental value of individual seedlings. During early stages of field tests quantities of cane available from individual seedlings are not sufficiently large for adequate milling tests with the usual commercial equipment, and even in later stages the potential seed supply is often considered too valuable to be sacrificed in quantities required for factory-scale milling tests. As stated in a previous report[1] it has been found possible closely to duplicate the work of commercial sugarcane mills by the use of small-scale milling equipment built along lines of commercial units. With equipment now in use at the U. S. Sugar Plant Field Station near Houma, Louisiana, normal juice extraction, and Brix and sucrose reduction factors can be determined with reasonable accuracy on relatively small samples of cane. It has been shown that while normal juice extraction and other milling factors for a given variety will vary from test to test, depending on the conditions under which the cane has been grown, the relationship with regard to any particular factor between any two varieties grown under comparable conditions will be fairly constant.[2]

In conducting milling tests, Co. 281 is taken as control and results obtained with any given variety are expressed in relative terms. The combined effect of differences in percent normal juice extraction and in Brix and sucrose reduction factors between a given variety and Co. 281 in the same test is resolved to a single numerical factor which has been designated as the varietal correction factor. A variety with normal juice extraction and sucrose reduction factors higher than observed with Co. 281 will have a correction factor greater than 1.00 while a variety maintaining an opposite relationship with respect to Co. 281 will have a correction factor of less than 1.00. The manner in which such a factor is calculated has been illustrated in a previous publication.[3]

Table 1 summarizes results of milling tests conducted during 1939, 1940, and 1941 on some of the more promising unreleased varieties. In each case samples of sugarcane were obtained from variety test plots in which replicated plantings of the varieties involved, including Co. 281, occurred in direct comparison. Thus while samples from a number of sources were used in this study, the variety being tested was in every instance grown under strictly comparable conditions with Co. 281. An 80-pound sample of fresh cane was used in each case. In the average of all tests Co. 281 gave an average normal juice extraction of 76.05 percent.

As will be noted by reference to table 1 the number of milling tests conducted with individual unreleased varieties in the group ranged from 2 to 7. Individual determinations are of course subject to the usual experimental errors and the accuracy of the varietal correction factor shown in each case is dependent on the number of tests conducted. Varietal correction factors based on 5 or more determinations are fairly reliable and are not likely to be greatly affected by results of future tests. Values based on fewer than 5 tests should be regarded as tentative.

As indicated by correction factors ranging from 0.92 to 1.04, differences in milling qualities between varieties in the group are considered extremely important. For instance under conditions prevailing in experimental milling tests, crusher juice analysis of Brix 15.00, sucrose 12.00% would indicate a yield of 151.3 pounds of 96° sugar per ton of cane from C.P. 33/409 and varieties of similar milling qualities. The same analysis in the case of C.P. 32/206 or 34/80 would indicate a yield of 171.0 pounds of sugar per ton of cane.

**TABLE 1. Summary of results of milling tests of important unreleased varieties of sugarcane**

| Variety | Total number of milling tests conducted | Varietal correction factor[1] | Fiber percent cane | |
|---|---|---|---|---|
| | | | Value for variety in tests during 1941 | Value for Co. 281 in same tests |
| Varieties assigned correction factors during 1941 | | | | |
| C. P. 31/509 | 3 | .98 | 14.43 | 12.18 |
| C. P. 31/529 | 5 | .98 | 12.84 | 12.20 |
| C. P. 32/206 | 4 | 1.04 | 10.81 | 12.20 |
| C. P. 33/224 | 3 | 1.00 | 12.54 | 12.25 |
| C. P. 33/243 | 5 | .98 | 13.11 | 12.20 |
| C. P. 33/372 | 5 | .94 | 14.86 | 12.20 |
| C. P. 33/409 | 6 | .92 | 14.70 | 12.20 |
| C. P. 34/1 | 5 | .98 | 12.69 | 12.20 |
| C. P. 34/21 | 7 | .94 | 14.46 | 12.20 |
| C. P. 34/53 | 2 | .92 | 15.60 | 12.01 |
| C. P. 34/54 | 2 | .92 | 15.87 | 12.01 |
| C. P. 34/75 | 2 | .98 | 12.81 | 12.01 |
| C. P. 34/80 | 6 | 1.04 | 10.71 | 12.20 |
| C. P. 34/86 | 2 | .98 | 12.20 | 12.01 |
| C. P. 34/92 | 2 | .94 | 14.25 | 12.01 |
| C. P. 34/115 | 3 | 1.02 | 12.76 | 12.06 |
| C. P. 34/120 | 3 | .98 | 13.53 | 12.18 |
| C. P. 34/139 | 4 | 1.02 | 11.07 | 12.13 |
| Standard Varieties | | | | |
| Co. 290 | 38 | 1.06 | 10.59 | 12.12 |
| C. P. 28/19 | 59 | .96 | 13.45 | 12.12 |
| C. P. 29/320 | 33 | .98 | 13.91 | 12.12 |

[1] Based on results of all tests.

The percentage of fiber as observed with each variety in the average of all tests during 1941 is also shown in table 1. Since samples of cane were obtained from a number of sources, averages shown for the different varieties are not strictly comparable, but inasmuch as values observed with Co. 281 in individual cases varied over a relatively narrow range, individual varietal values are fairly representative. For obvious reasons there is a strong inverse relationship between fiber content and varietal correction factor. However the results of these and similar tests conducted during previous years indicate rather conclusively that fiber content *per se* cannot be taken as a direct measure of milling qualities. The quantity (and possibly the analysis) of residual juice retained in the bagasse from a ton of cane apparently depends upon the physical quality or condition as well as on the quantity of the fiber. It has been our observation that, on the whole, varieties of relatively high fiber content will show a lesser fraction of residual juice per unit weight of bagasse than will varieties of relatively low fiber content.

**TABLE 2. Summary of results of milling tests on seedlings from two important crosses.**

| Cross | Number of seedlings tested for milling qualities | Varietal Correction Factor | |
|---|---|---|---|
| | | Range | Mean |
| Co. 281 x U. S. 1694 | 8 | 0.92 - 1.02 | 0.971 |
| P. O. J. 2725 x C. P. 1165 | 9 | 1.01 - 1.07 | 1.037 |
| | | Difference | 0.066±0.013 |

## Inheritance of Milling Qualities

No systematic study has been made of milling quality as occurring among individual seedlings obtained from different crosses. Only seedlings which have proved definitely superior with respect to yield of cane and analysis of the juice are tested, hence the vast majority of initial selections do not reach this stage of our investigations. In the course of the last few years, milling tests were conducted on 8 seedlings from the cross Co. 281 x U.S. 1694 and on 9 from the cross POJ 2725 x C.P. 1165 results of which are summarized in table 2. It is considered significant that in only one case out of 8 a seedling from the first-mentioned cross showed a millability factor higher than the base value of 1.00 while all 9 seedlings from the other cross showed correction factors higher than 1.00. The average difference of 0.066±0.013 observed between seedlings of the two progeny groups is highly significant and indicates a basic difference between the two sets of parents with respect to the transmission of milling qualities in the offsprings.

[1]Arceneaux, G., Krumbhaar, C. C., and Bisland, R. B. Testing cane to determine probable milling yield. Facts about Sugar. 28:350-353. Sept. 1933.
[2]Op. cit.
[3]Op. cit.

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

**Help Our Country**
**Buy**
**WAR BONDS**
**and**
**STAMPS**

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

**Marketing Quotas-Jones-Costigan and 1937 Sugar Acts. A. A. A. Records**
**Short Tons, 96° Basis**

| | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942[1] |
|---|---|---|---|---|---|---|---|---|---|
| Mainland Beets | 1,556,166 | 1,550,000 | 1,342,179 | 1,417,009 | 1,584,083 | 1,566,719 | 1,549,898 | 2,230,037 | 1,862,811 |
| Mainland Cane | 261,034 | 260,000 | 392,016 | 472,337 | 429,434 | 424,727 | 420,167 | 445,000 | 504,995 |
| Mainland Total | 1,817,200 | 1,810,000 | 1,734,195 | 1,889,346 | 2,013,517 | 1,991,446 | 1,970,065 | 2,675,037 | 2,367,806 |
| Hawaii | 948,264 | 925,969 | 1,032,812 | 984,210 | 922,082 | 948,218 | 938,037 | 993,522 | 1,127,420 |
| Puerto Rico | 807,312 | 788,331 | 909,445 | 897,063 | 815,582 | 806,642 | 797,982 | 1,148,160 | 959,088 |
| Virgin Islands | 5,304 | 5,179 | 3,696 | 10,023 | 3,923 | 9,013 | 8,916 | 12,829 | 10,716 |
| Offshore Total | 1,760,880 | 1,719,479 | 1,945,953 | 1,891,296 | 1,741,587 | 1,763,873 | 1,744,935 | 2,154,511 | 2,097,224 |
| Domestic Total | 3,578,080 | 3,529,479 | 3,680,148 | 3,780,642 | 3,755,104 | 3,755,319 | 3,715,000 | 4,829,548 | 4,465,030 |
| Philippines | 1,005,602 | 981,958 | 1,000,829 | 998,499 | 991,020 | 981,912 | 982,441 | 982,663 | 1,237,764 |
| Cuba | 1,866,482 | 1,822,596 | 2,102,607 | 2,148,951 | 1,953,759 | 1,932,343 | 1,749,744 | 2,750,461 | 2,297,533 |
| Full Duty | 25,836 | 25,228 | 29,103 | 114,641 | 80,683 | 85,812 | 24,177 | 440,304 | 31,747 |
| Foreign Total | 2,897,920 | 2,829,782 | 3,132,539 | 3,262,091 | 3,025,462 | 3,000,067 | 2,756,362 | 4,173,428 | 3,567,044 |
| Grand Total | 6,476,000 | 6,359,261 | 6,812,687 | 7,042,733 | 6,780,566 | 6,755,386 | 6,471,362 | 9,002,976 | 8,032,074 |
| Deliveries Total | | | 6,706,113 | 6,671,402 | 6,643,253 | 6,867,518 | 6,890,667 | 8,098,321 | |
| Consumption Total[2] | 5,750,915 | 5,980,697 | 6,184,093 | 6,373,453 | 6,276,537 | 6,326,334 | 6,398,097 | 7,356,071 | |
| Consumption Per Capita[2] | 90.71 lbs. | 93.78 lbs. | 96.29 lbs. | 98.30 lbs. | 96.11 lbs. | 96.20 lbs. | 96.62 lbs. | 111.32 lbs. | |

[1] Initial 1942 Quotas.
[2] Weekly Statistical Sugar Trade Journal Jan. 15th, 1942.

"for 5 years I'VE KEPT MY EQUIPMENT IN GOOD CONDITION AND MY OPERATING COSTS LOW WITH MAGNOLIA PRODUCTS"*

W. O. Dunn
PURCELL, OKLAHOMA

*Left to right:* J. O. Nitzel; I. S. Levins, Mognolia Agent; W. O. Dunn*

TEAMWORK always gets the most work done with the least effort. That's why so many Southwestern farmers use a combination of Magnolia Products in their tractors and other power equipment. Magnolia Products are produced to work together. They make a perfect combination to help keep equipment in ready-to-work condition . . . reduce out-of-service time and overhaul expense . . . minimize wear and lengthen useful life.

But the quality of the products is not entirely responsible for their popularity with successful farmers. The friendliness of Magnolia Agents, plus their splendid service and sincere desire to be helpful, go hand-in-hand with the outstanding qualities of Magnolia Products. Put this winning combination to work for you.

*This is o voluntary statement for which no compensotion of any description was given Mr. Dunn

B-MF-103

MAGNOLIA AGENTS

A SOCONY-VACUUM COMPANY

Offer immediate delivery of tractor lubricants and fuels

MAGNOLIA PETROLEUM COMPANY

# Defense Transportation

Deferment for the duration of all meetings, conventions, and group tours which are not closely related to furtherance of the war effort was called for today by Joseph B. Eastman, Director of Defense Transportation. Mr. Eastman asked also that all state and county fairs be postponed.

Attendance at meetings which are closely related to the war program should be skeletonized, Mr. Eastman said.

Pointing to the steady rise in the volume of passenger traffic on railroad and bus lines, Mr. Eastman appealed to the American people voluntarily to impose certain restrictions on their travel.

Vacations should be staggered throughout the year, he said, and vacation travel should be scheduled so that trips would neither start nor terminate on weekends. Private passenger cars should not now be used for extensive vacation travel, he added.

"Do not travel, aside from vacations, for mere pleasure or when travel can readily be avoided," Mr. Eastman said.

"If the American people will voluntarily impose certain restrictions upon their travel such as have been indicated, there is good reason to hope that no drastic control over travel will be necessary." Mr. Eastman's statement follows:

"The Office of Defense Transportation continues to receive many inquiries regarding the possibility of limitations on travel during the months immediately ahead.

It is difficult to forecast the future with any accurracy, but it is clear that travel as usual is out for the duration.

"The volume of passenger traffic on railroad and bus lines is rising steadily and is now about fifty percent greater than last year.

"Hundreds of thousands of troops who must be moved over long distances have first call on your passenger facilities. Troop movements have been heavy, but they are constantly increasing and will be much heavier. The volume of necessary business travel is also rising.

"Private passenger cars have been providing much more intercity transportation, measured in passenger-miles, than the railroad and bus lines combined. As the use of these cars for such transportation is restricted, either by gasoline rationing or voluntarily, travel is shifting to the railroad and bus lines, and it is likely that this shift will steadily increase in volume.

"The railroad and bus lines are continually being called upon to install new service for the transportation of workers to and from the great new war production plants.

"Moreover, railroad facilities are being put to great strain in the handling of the heavy volume of freight shipments which result from the rising war production, dislocation of ocean shipping, and war activities in regions where hitherto traffic has been sparse. Obviously the movement of essential freight traffic

must take precedence over all passenger traffic which is not involved in the war program.

"In the light of these facts, the Office of Defense Transportation requests that the American people voluntarily impose the following restrictions upon their travel:

"1. Defer all meetings, conventions, and tours of groups not closely related to the furtherance of the war effort, since such mass movements interfere with regularly scheduled traffic and frequently require the use of extra equipment.

"In the case of meetings closely related to the war effort, attendance should be skeletonized along the lines of the splendid example set by the American Legion in its forthcoming convention.

"2. Postpone all State and county fairs. Farmers should not be encouraged to use, for nonessential purposes such as these, the tires which are so necessary to their livelihood and so necessary to provide a continuing food supply. Nor should they transfer the burden of such travel to public carriers.

"3. Vacations are desirable from the standpoint of public health, efficiency and morale, and vacation business has furnished a means of livelihood to many people in various parts of the country. Clearly, however, private passenger cars should not now be used for extensive vacation travel, and if such travel should be concentrated in large volume on the railroad and bus lines during the summer months, there is danger of serious congestion. Business organizations and other employers should stagger the vacations of employees throughout the year so far as practicable and, to reduce weekend traffic congestion, encourage their employees to leave and return from vacations during the middle of the week.

"It may be that in certain parts of the country there will be less congestion of passenger travel than in others. Therefore, those planning vacations should consult agents in advance as to the prospects for travel over the lines which they contemplate using. Travelers cannot count on normal service, for delays, crowding, and scarcity of accomodations will occur as a result of heavy travel, and on some lines more than on others. Those who undertake vacation travel must expect and be ready to endure such discomforts.

"4. Do not travel, aside from vacations, for mere pleasure or when travel can readily be avoided. The railroad and bus lines have taken commendable action in eliminating inducement fares, advertising intended to stimulate travel, excursions, and the operation of special trains to recreational events and meetings.

The Office of Defense Transportation will make every effort in conjunction with the carriers to eliminate operations and thus conserve the supply of passenger equipment for the travel which should be maintained.

"If the American people will voluntarily impose restrictions upon their travel such as have been indicated, there is good reason to hope that no drastic control over travel will be necessary."

**PAUL, RICE & LEVY**
INCORPORATED

**Wholesale**

**INDUSTRIAL, MILL & MARINE SUPPLIES**

Day, Ra. 6123 Night, Fr. 2019

**501-505 Poydras St.**

**New Orleans, - - La.**

**O I C VALVES**
**GUILD & GARRISON PUMPS**
**INTERNATIONAL INDUSTRIAL PAINTS**
**CHESTERTON PACKING**
**K-TING MANILA ROPE**
**CONSOL OILS**
**VULCAN SOOT BLOWERS**

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

**LAMBORN & COMPANY, INC.**
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

**LE BOURGEOIS BROKERAGE CO.**
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
**HARRY L. LAWS & CO., INC.**
Brokers and Distributors
SUGAR and MOLASSES
**SUGAR FUTURES**
American Bank Building New Orleans, La.

**GAY, SULLIVAN & CO., INC.**
SUGAR
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

**STAUFFER, ESHLEMAN & CO., LTD.**
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
**CYANAMID**
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

**INDUSTRIAL LUBRICANTS**

BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
**STANDARD OIL CO. OF LA.**

FOR SUGAR CANE FINANCING
STATE AGRICULTURAL CREDIT CORPORATION, INC.
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

**AMERICAN MOLASSES CO.**
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LEGARDEUR LLOYD R. MARKS
**R. J. LEGARDEUR & COMPANY**
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

**PENICK & FORD, LTD., INCORPORATED**
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

**STANDARD SUPPLY AND HARDWARE CO., INC.**
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

**E. A. RAINOLD, INC.**
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

# THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 20 NEW ORLEANS, LA., AUGUST 1, 1942 No. 21

Chemistry Library, Louisiana State University, La.

New Seed Cane C. P. 34-120 is being released this year for commercial planting. A description of this seed cane was given on the first page of the *Sugar Bulletin* of July 1st.

In this issue we are printing on a perforated sheet which may be detached, a special form on which orders for this seed cane will be received in this office. Additional order forms may be secured by mailing a request on a post card.

The seed cane is growing in seventy-four locations in the cane belt and every effort will be made to have distribution as close to the origin or plot as reasonably possible.

Be sure that your order is post-marked not later than September 5th, 1942.

THE SUGAR BULLETIN

414 Whitney Bldg., New Orleans

Marcel J. Voorhies, Editor
Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
Subscription Price, 50 Cents per Year.

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE
President, W. C. Kemper, Franklin, La.
1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

EXECUTIVE COMMITTEE
W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

# Insects and Sugarcane

(*By J. Dick, Ph.D.*)

(*Proceedings of the Fifteenth Annual Congress of the South African Sugar Technologists Association, pages* 107-112. 1941)

By comparison with other producers of agricultural products, the South African sugar grower is fortunate in not having serious insect pests to combat. It is somewhat remarkable that he has escaped serious insect invasions, since cane for planting was for many years introduced without any adequate inspection. At present this danger of introducing pests is very largely eliminated by elaborate quarantine precautions. There is, however, always the danger of plants being introduced by other than legitimate means thus escaping inspection.

A number of insects attack sugarcane in South Africa, but, in general, they cause little appreciable damage because they do not occur in sufficiently large numbers, their outbreaks are sporadic, and they soon disappear, or because the cane is resistant to their attack and rapidly recovers. It is possible that any of these insects may, through a change in one or more of the factors that influence their numbers or their effect on the cane; become sufficiently harmful to be regarded as a pest. An insect outbreak might also occur as a result of a species already present undergoing a change of diet and transferring its attentions from wild plants or other cultivated plants to sugarcane; a South African example being the citrus snout beetle which originally fed on wild bushes, but has become a pest of citrus within the last few years.

Insects attacking sugarcane in South Africa are as follows:

The corn aphid, *Aphis maidis,* is important as a vector of mosaic disease. The sugarcane aphid, *Aphis sacchari,* sometimes becomes numerous, but is generally controlled by natural enemies. The sugarcane mealybug, *Pseudococcus sacchari,* is probably the most common sugarcane insect in Natal. The direct effect of this insect sucking the juices from the plant appears to be slight, but impurities produced by the insect may make juice clarification more difficult. The leafhopper, *Cicadulina mbila,* is important as a vector of streak disease (not chlorotic streak). Control of this disease is being undertaken more by growing immune varieties than by combating the insect. Storey and McClean have tested 25 other species of Homoptera for ability to transmit streak, but none transferred the disease. There are two spittle insects which normally live on wild grasses but which sometimes attack sugarcane on moist land. The sugarcane leafhopper, *Perkinsiella saccharicida,* Kirk., which was formerly such an important pest in Hawaii, is occasionally found. Termites sometimes cause considerable damage, but may be controlled by treating setts with repellents or fumigating the nest with fumes of arsenic and sulphur.

The red locust, *Nomadacris septemfasciata,* has up to the present been the most serious pest of sugarcane in Natal. Arsenical baits have been developed which, if properly applied, almost completely eradicate this insect in the hopper stage.

The sugarcane cutworm causes noticeable damage but is attacked by parasitic flies, and cutworms appear to be destroyed when the trash is burnt. The army-worm, *Laphygma exempta,* is at times destructive to cane. It is controlled by poison baits and by barriers to prevent migration.

The borer, *Sesamia, calamistis,* which is common in corn, sorghum, reeds, and a number of larger grasses, quite often bores sugarcane, occurring in the spindle in harder varieties, such as Co. 281, while in the softer varieties, such as P.O.J. 2725, it burrows in the stalk. The maize stalk borer, *Busseola fusca,* is rarely found in cane.

The borer, *Eldana saccharina,* was first collected in 1929, but was not reported to be damaging sugarcane until 1939. It has been found attacking sugarcane and various grass crops in the Gold Coast and French West Africa. The origin of the infestation is unknown since, with the exception of a single specimen, the insect has been found only on the Umfolozi Flats. Damage by this insect is most severe in soft canes, the insect being comparatively rare in Co. 281. Parasites do not appear to be common since only one parasitized larva has been found.

Outbreaks of a beetle, *Heteronychus licas,* have occurred in Portuguese East Africa and on the Umfolozi Flats in Zululand. They most commonly occur after floods. The adults attack particularly the soft parts of recently planted cane and may burrow into the sett. The larvae do not appear to attack living plants. Another beetle and a weevil have been found attacking sugarcane.

**Four 40-inch Cresson-Morris Centrifugals, copper basket with self cutter, and Mixer for sale.**
**COLUMBIA SUGAR CO.**
**Franklin, La.**

# NOTICE!

The American Sugar Cane League has been directed by the U. S. Department of Agriculture and the Louisiana Experiment Station to undertake a fair and impartial distribution of the newly released variety of cane known as

## C.P. 34-120

A number of small plots of this cane are subject to this distribution. It has been grown with the understanding that those growing it shall be paid for it at the price of mill cane plus $1.50 per ton for cutting it and loading it on the vehicle of the purchaser and the League is authorized by the U. S. Department of Agriculture and the Louisiana Experiment Station to charge a distribution fee of 85 cents a ton.*

If you wish some of this cane please fill out and sign the application blank on the reverse hereof. NO OTHER FORM OF APPLICATION WILL BE ACCEPTED, AND IT MUST BE RECEIVED AT THE OFFICE OF THE AMERICAN SUGAR CANE LEAGUE, 414 WHITNEY BUILDING, NEW ORLEANS, NOT LATER THAN SEPTEMBER 5th, 1942.

In the absence at this time, of exact figures supplied by the Government on the amount of the benefit payment for 1942 the precise price of mill cane is not known. You are therefore required to agree to pay the best approximation we can now make, $5.44 per ton or actual mill price plus benefit payments.

## Deposit of $1.00 per ton must be made with application

Remember—

*The last day on which applications will be received is September 5th, 1942.*

---

*This is to cover the cost of distribution, which involves clerical, stenographic, and administrative work, printing, postage and a very heavy responsibility. It is likewise a partial reimbursement to the League for various extraordinary expenses incurred in bringing about the acquisition of new canes and the preliminary experimentation therewith before release. The League has been designated by the U. S. Department of Agriculture and the Louisiana Experiment Station to make the distribution simply because they believe it will carry out the task more efficiently, and certainly more cheaply, than any other agency.

The American Sugar Cane League
414 Whitney Bank Bldg.
New Orleans, La.

.....1942

I hereby apply for:

.....tons of C. P. 34-120 seed cane.

I understand the cane will cost me a total of approximately $7.79 (Seven Dollars and Seventy-Nine Cents) a ton plus the average cost of inspection and hot-water treatment if necessary, and I agree to said cost.

| | |
|---|---|
| Mill price per ton at $3.73 sugar..... | $3.83 |
| Conditional payment at 80¢ a cwt..... | 1.28 |
| Value of molasses at 18¢..... | .33 |
| Cost of cutting and loading..... | 1.50 |
| (This sum all goes to the grower of the cane).. | $6.94 |
| Distribution charge (Goes to the American Sugar Cane League)..... | .85 |
| Total:..... | $7.79 |

The average cost of inspection and treatment, if necessary, to be added to the $7.79 per ton.

I enclose $.....which is a deposit of earnest money at the rate of $1.00 per ton, non-refundable (unless the cane is not tendered me). The remainder I will pay when the cane is ready to be delivered to me, and I am to be notified concerning this and supplied with the name and address of the grower from whom I am to procure the cane, which I will send for not later than November 2d, 1942. Should the cane fail to be tendered to me by that date all payments and deposits made by me are to be refunded in full on each ton not tendered.

I had.....acres of Sugarcane in 1941-42.

This application is made with the full understanding on my part that it may not be possible to tender me as much cane as I apply for, owing to the limited supply.

Name.....

Address.....

TEAR ON THIS PERFORATED LINE

# Sugarcane Wax Studies, 1941-1942

*(By R. T. Balch and C. B. Broeg, Agricultural Chemical Research Division, Bureau of Agricultural Chemistry and Engineering, U. S. Department of Agriculture, Houma, La.)*

Since the last meeting of the Manufacturing Section of the Louisiana Sugarcane Technologists Association, one year ago, the Bureau of Agricultural Chemistry and Engineering has actively continued at Houma, Louisiana, its investigations relating to the possibility of recovering sugarcane wax and other by-products from the sugarcane industry. It was with pleasure that we accepted the invitation to present to your group a resume of the findings relating to this subject that have accumulated during the past year.

Investigations on cane wax have been conducted along two main lines. The first was concerned with the distribution of crude wax (including true wax, fats and fat-like constituents) in various sugar factory products, for, before any attempt can be made to increase the wax content of any particular product such as the mud press-cake, it is necessary to know how much of the wax is removed from the cane by milling and how efficiently the wax is recovered from the juice in the clarification process under present operating conditions. The second line of investigation has had to do with recovery of wax and other products from dried clarification mud press-cake by solvent extraction methods, because this material and these methods were the most logical ones to use for the recovery of valuable by-products.

## Distribution of Crude Wax in Sugar Factory Products

There is very little information in the literature in regard to the distribution of wax and fatty compounds in sugar-house products, in spite of the fact that the existence of these byproducts has been known for a great many years. Bardorf,[1] who reported a rather systematic study of this character in 1927, believed that these constituents, to which he assigned the name "cane wax complex," were responsible for clarification and other difficulties in both raw sugar manufacture and the refining of raw sugar. He chose a double-solvent extraction method for determining the wax content of the various products analyzed. Since he employed acetone and alcohol, his figures for wax in products containing moisture and sugar might be in some error because of the slight solubility of sugar in these solvents, especially when a little moisture is present.

In our study the crude wax was determined by the use of carbon tetrachloride ($CCl_4$). The crude wax in juices was removed by a trapping method, similar to the one used by Bardorf, prior to its extraction, while samples of bagasse and press-cake were simply dried and extracted directly. Since this study was designed to determine the extent of wax removal from the cane and its recovery in the muds, only the wax products were naturally obtainable from regular factory records so it was possible to calculate a wax balance. Samples of the products mentioned were taken from six different factories and the appropriate analyses were made. The data are presented in Table 1.

If the crude wax content of the clarified juice is compared with that of the raw juice, it is obvious that about 93% of the wax which had been dispersed in the cane juice was removed by clarification and was contents of raw and clarified juices, bagasse and press-cake needed to be determined. The weights of these discarded by the factory with the mud press-cake. However, it can also be noted that only from one-third to one-half of the crude wax on the cane became dislodged in the milling operations and was dispersed in the juice. Thus, a greater percentage of wax is lost with the bagasse than is available for recovery from the press-cake and, as a result, there is considerable room for improving over-all wax recovery. Naturally, it remains to be determined whether this can be done without disturbing manufacturing operations, but we plan to make such studies as time permits, especially if commercial extraction of cane wax is undertaken.

In addition to the phase of study just discussed, attention was given to samples of mud press-cake and crude wax received from twenty-two factories scattered over the sugar-growing area of Louisiana. Some of these samples were individual catch samples, while others represented weekly operations and still others were quite representative of the whole season's output of press-cake. All the small and large lots of press-cake were dried while in a fresh condition and analyzed. The large lots which amounted to from a few pounds to over a ton were reserved for use in the pilot extraction plant. Analyses of these press-cake samples are given in Table 2.

It may be observed that there is a wide variation in the wax content of mud press-cake from different factories as well as between samples from the same factory. The reasons for all these variations are not well defined but unquestionably some variations are due to the milling of different varieties of cane at the time of collecting the samples. The amount of wax on the cane and the percentage of muds produced would greatly affect the wax content of the press-cake. The weight of muds per ton of cane seems to be quite variable between factories, and when this is taken into consideration, it is obvious that many factories producing muds of low wax content are actually discarding as much wax as some factories having muds of high wax content. The comparison of the wax contents of press-cake from factories located in the western district with those of press-cake from the eastern district reveals the fact that the former are distinctly higher. This is doubtless due to the milling in the western area of a larger percentage of Co. 290 cane which is the best wax producing variety grown commercially in Louisiana at the present time.

**TABLE I—Distribution of Crude Wax in Sugar Factory Products**

| Factory | Raw Juice | | Bagasse | | Total Crude Wax Avail. on Cane | Clarified Juice | | Press Cake (Moist. Free) | | Total Wax Discharged on Cane | Wax in Press Cake on Total Wax |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | on Sample | on Cane | on Sample | on Cane | | on Sample | on Cane | on Sample | on Cane | | |
| | % | % | % | % | % | % | % | % | % | % | % |
| 1 | 0.070 | 0.069 | 0.85 | 0.14 | 0.209 | 0.005 | 0.005 | 16.49 | 0.088 | 0.230 | 41 |
| 2 | 0.092 | 0.079 | 0.68 | 0.10 | 0.179 | 0.004 | 0.003 | 9.97 | 0.079 | 0.182 | 44 |
| 3 | 0.090* | ----- | 1.15 | 0.18 | ----- | 0.006 | ----- | 11.74 | ----- | ----- | -- |
| 4 | 0.062 | 0.054 | 0.65 | 0.10 | 0.154 | 0.004 | 0.003 | 6.31 | 0.047 | 0.147 | 31 |
| 5 | 0.078 | 0.076 | 0.88 | 0.14 | 0.216 | 0.003 | 0.003 | 9.20 | 0.080 | 0.222 | 37 |
| 6 | 0.083 | 0.073 | 0.69 | 0.11 | 0.180 | 0.006 | 0.005 | 7.49 | 0.068 | 0.183 | 38 |

* Portion of juice diverted from sirup.

## Pilot Plant Wax Extraction Studies

In the report that was made last year[2] it was stated that plans were being formulated to erect a small pilot wax-extraction plant at the U. S. Sugar Plant Station, Houma, Louisiana, for the purpose of studying solvent extraction of cane wax from mud press-cake, as well as to provide a supply of wax that could be sent to prospective users to determine its most useful applications. It can now be reported that such a plant has been put in operation and is open to inspection.

The method selected for use in this plant is essentially the same as described to you last year. Briefly, the dry mud press-cake is extracted with five changes of hot solvent. Heating is done in the digester holding the charge of press-cake. After each digestion the extract is drawn off by gravity. The first two extracts are combined and filtered; the solvent is removed and recovered in a simple still; the "bottoms" constitute the crude wax. The other three extracts are set aside and used in sequence for extracting the next charge of press-cake. The spent muds are subjected to steam distillation for the recovery of the remaining solvent.

Most of our attention to date has been given to determining the efficiency of various solvents for extracting crude wax from dried press-cake. Three solvents have been tested so far (and a fourth is now in use) on mud press-cake from two sources prepared on Oliver-Campbell filters. One lot of press-cake was distinctly denser than the other and contained on the average much larger and thicker pieces. It will be observed from Table 3 that this physical difference between the two lots had its influence upon the efficiency of extraction in regard to the temperature and time of contact required for a given solvent. The same efficiency of extraction for the two lots could have been obtained by increasing the time of contact for the lot that was more difficult to extract.

It is seen that there is practically no difference between the efficiency of toluol, benzol and the extraction naphtha (b.p. 95-103° C.) for extracting crude wax. Toluol has been considered the most desirable solvent for this purpose, but because of war restrictions substitutes had to be found. Benzol was not expected to present any technical difficulties (and it did not in the trials) because this solvent was used in the commercial recovery of cane wax at Natal, South Africa, beginning in 1916.[3] There were more misgivings regarding the applicability of an extraction naphtha from petroleum because of the lower solubility of wax in such a solvent and because of reported difficulties in removing the last traces of solvent from the wax. If the latter defect does not appear with the type used it will have a distinct advantage over toluol in respect to price and over benzol in respect to toxicity. Since modern extraction naphthas are being used with considerable success for the extraction of vegetable oils and naval stores products, it would seem that the faults inherent in the older extraction naphthas have been largely corrected. Further study is being made of the extraction naphthas for this service for it is believed that some of them will be entirely suitable for commercial extraction of crude wax, except, perhaps when a specially pure wax is required.

Studies are still in progress to determine the effect of temperature and time of digestion on the extraction of muds of uniform physical structure for the purpose of establishing more closely the optimum conditions for extraction. These conditions will doubtless hold for any of the solvents to be recommended but would have to be altered to suit the physical structure of the mud press-cake. If the press-cake has a dense structure the solvent is slow to penetrate and to extract the wax.

**TABLE 2. Wax and Fats Content of Mud Press Cakes**

| District | Factory | Number of Samples | Crude Wax (Moist. Free) | | | Hard Wax | Fatty Products |
|---|---|---|---|---|---|---|---|
| | | | Min. | Max. | Ave. | | |
| | | | % | % | % | % | % |
| Eastern | 1 | 7 | 6.92 | 12.03 | 9.43 | 6.30 | 3.13 |
| | 2 | 5 | 5.51 | 7.83 | 6.41 | 4.46 | 1.95 |
| | 3 | 4 | 5.15 | 8.21 | 6.45 | 4.16 | 2.29 |
| | 4 | 4 | 4.69 | 10.79 | 8.08 | 5.71 | 2.37 |
| | 5 | 4 | 11.55 | 13.37 | 12.24 | 8.86 | 3.38 |
| | 6 | 3 | 10.33 | 12.85 | 11.38 | 7.88 | 3.50 |
| | 7 | 1 | ---- | ---- | 6.92 | 4.89 | 2.03 |
| | 8 | 1 | ---- | ---- | 5.38 | 3.57 | 1.81 |
| | 9 | 1 | ---- | ---- | 9.23 | 6.84 | 2.39 |
| | 10 | 1 | ---- | ---- | 11.99 | 8.89 | 3.10 |
| | 11 | 2 | 5.79 | 7.49 | 6.64 | 4.45 | 2.19 |
| | 12 | 3 | 5.67 | 9.48 | 9.12 | 5.67 | 2.45 |
| | 13 | 7 | 5.93 | 8.34 | 6.88 | 4.51 | 2.37 |
| Western | 1 | 5 | 10.53 | 13.09 | 11.75 | 8.43 | 3.32 |
| | 2 | 2 | 13.29 | 13.42 | 13.36 | 10.07 | 3.29 |
| | 3 | 1 | ---- | ---- | 14.35 | 10.81 | 3.54 |
| | 4 | 2 | 15.31 | 17.24 | 16.28 | 12.89 | 3.39 |
| | 5 | 2 | 11.52 | 12.91 | 12.22 | 9.17 | 3.05 |
| | 6 | 32 | 8.90 | 14.73 | 12.00 | 9.26 | 2.74 |
| | 7 | 37 | 9.17 | 16.62 | 11.31 | 8.67 | 2.64 |
| | 8 | 2 | 11.74 | 12.30 | 12.02 | 8.98 | 3.04 |
| | 9 | 1 | ---- | ---- | 15.39 | 11.29 | 4.10 |

The physical structure of the mud press-cake is of particular interest because of its close relationship to the efficiency of extraction and the type of extraction equipment that can be used. If the mud particles are porous, as with press-cake from continuous filters, extraction of wax is very rapid, while with press-cake of denser structure, as that from plate-and-frame presses, the reverse is true. In this connection, consideration is being given to the possibility of drying the press-cake in a form suitable for solvent extraction without further treatment. Material prepared by passing the wet press-cake through an extrusion mill (meat grinder) and drying in granular condition has an excellent hard structure suitable for mechanical handling and doubtless suitable, also, for continuous solvent extraction processes now being used successfully in large commercial installations for extracting vegetable oils. It is believed that the porosity of the material can be controlled somewhat by the amount of fine bagasse contained in the press-cake. These ideas are being tried on lots of press-cake that have been already dried; the cakes are ground, moistened with sufficient water to yield a plastic mass, put through an extrusion mill and then redried in a tray drier. It is hoped that sufficient information will be obtained from this work to correlate properly the physical structure and drying of the press-cake in respect to solvent extraction.

Under the conditions employed in this study there has been no noticeable difference in the properties of the crude wax extracted by the different solvents from the same lot of press-cake. The properties of crude waxes differ somewhat, however, when the waxes represent press-cake from different sources. The crude wax is a dark green product, somewhat tacky, but fairly hard. It contains from about 20% to 45% fatty constituents, which are responsible for the tackiness. When these are removed, a hard wax product is obtained which, however, is still dark in color. The green color of the crude wax is primarily due to chlorophyll and is partially removed with the fatty constituents. The pigments that remain with the hard wax are very difficult to remove or bleach. No effort has yet been made in this work to refine the wax, other than to remove the fatty constituents. The trade would probably like to have the wax in a somewhat more refined condition, but not necessarily bleached.

Removal of the fatty constituents from the crude cane wax has been accomplished in the pilot plant

operations by adapting the process which was developed on a laboratory scale and disclosed one year ago; namely, extraction at ordinary temperatures with acetone. The crude wax, chipped and placed in vessels, is extracted with acetone for about a week with a daily change of solvent. The acetone is removed from the extract by distillation in a simple still and is condensed for further use. The "bottoms" constitute the crude fats. The wax which remains as an insoluble product after the acetone treatment is steamed in order to eliminate the residual solvent which is recovered by condensation. In this step of the process the wax takes up a considerable amount of water which later must be removed; otherwise the wax will not be satisfactory for use because even a small amount of moisture causes excessive foaming when the wax is heated. The moisture has been removed by heating the wax in a steam jacketed kettle until all foaming subsides. It might be possible to eliminate this step if the residual solvent were removed from the wax by blowing out with heated air instead of by steaming.

**TABLE 3. Solvent Extraction of Crude Wax**

| Source of Press Cake | Number of Batches Extracted | Solvent Used | Crude Wax Content | | Extraction Efficiency | Ratio of Weights of Solvent to Press Cake | Approximate Temperature of Digestion | Boiling Point of Solvent |
|---|---|---|---|---|---|---|---|---|
| | | | Press Cake (Moist. Free) | Extracted Cake (Orig. Basis) | | | | |
| | | | % | % | % | | °C | °C |
| 1 | 31 | Toluol | 11.67 | 1.01 | 91.55 | 10.8 | 80–85 | 110 |
| | 27 | Benzol | 10.71 | 0.91 | 91.43 | 10.0 | 70–75 | 81 |
| | 11 | Naphtha | 10.46 | 0.91 | 91.38 | 8.3 | 80–85 | 95–103 |
| 2 | 31 | Toluol | 12.59 | 1.72 | 85.32 | 9.7 | 80–85 | 110 |
| | 6 | Benzol | 10.40 | 1.60 | 83.91 | 8.6 | 70–75 | 81 |
| | 20 | Naphtha | 11.67 | 1.56 | 86.42 | 7.6 | 80–85 | 95–103 |

Although war conditions have not yet restricted the use of acetone for commercial extraction purposes, consideration has been given to substitutes that might be used if necessary. It is certain that the petroleum ether (petane fraction) or ethyl ether could be employed, but they have not been seriously considered because of their low boiling-point and high inflammability. One of the most likely substitutes is methyl ethyl ketone which appears to be somewhat more efficient than acetone in removing the fatty constituents from crude wax. It dissolves more true wax, however, which is a disadvantage. Its relatively high boiling point of 80° C. would make it a better solvent than acetone for warm climates, but it might also make its recovery somewhat more of a problem, unless the solvent used for the extraction of the crude wax was toluol or one boiling in the same approximate range. Provision is being made to use this substitute for acetone in the pilot plant operations in order to determine what difficulties might be expected if it were adopted for commercial use. No difficulty with contamination of the acetone has been experienced other than with a small amount of moisture which does not seem to affect appreciably the extraction of the fatty material from the crude wax.

Interest in sugarcane wax has been so great that it has not been possible to supply all requests for samples. However, a large number of samples of substantial size have been submitted to prospective users. A majority of these have indicated that sugarcane wax would have many industrial applications if available in commercial quantities. It might be added, also that several concerns are sufficiently interested to investigate the possibilities of commercial production of hard cane wax similar to the product resulting from these studies.

The value of the acetone fraction of the crude wax has not yet been established, but studies directed toward this end are being made. Some of the constituents, such as the phytosterols and carotene, may find their way into the nutrition field as vitamins; fatty acids of various kinds already have an established market. However, the fatty fraction is highly colored with chlorophyll and it remains to be determined whether this pigment, which has a strong affinity for the fatty material, can be economically extracted.

Since the waste clarification mud press-cake contains not only a very desirable hard wax but other constituents that can be easily recovered, all of these ought to be considered in determining the value of the press-cake as raw material for a by-products industry. Doubtless many of you wonder if it would pay to recover these by-products of the sugar industry; perhaps the most informative answer that can be given at present, lacking definite information in regard to the cost of constructing and operating a wax-extraction plant, is to state that solvent extraction methods are being used in this country, presumably successfully, on materials containing in some instances a smaller proportion of recoverable products having lower commercial value[4] than sugarcane wax.

FOR SALE
36 GAUGE RAILROAD EQUIPMENT
2 Porter Locomotives
75 Wooden body 8 wheel cars
5 Steel body 8 wheel cars
Complete truck scale, 20 ton capacity
Equipment can be seen at Smithfield Factory
West Baton Rouge Parish.
Above offered subject to prior sale.

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

**LAMBORN & COMPANY, INC.**
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

**LE BOURGEOIS BROKERAGE CO.**
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
**HARRY L. LAWS & CO., Inc.**
Brokers and Distributors
SUGAR and MOLASSES
**SUGAR FUTURES**
American Bank Building New Orleans, La.

**GAY, SULLIVAN & CO., INC.**
**SUGAR**
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

**STAUFFER, ESHLEMAN & CO., LTD.**
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
**CYANAMID**
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

**INDUSTRIAL LUBRICANTS**

BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
**STANDARD OIL CO. OF LA.**

FOR SUGAR CANE FINANCING
**STATE AGRICULTURAL CREDIT CORPORATION, INC.**
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

**AMERICAN MOLASSES CO.**
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LeGardeur Lloyd R. Marks
**R. J. LeGARDEUR & COMPANY**
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

**PENICK & FORD, LTD., INCORPORATED**
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

**STANDARD SUPPLY AND HARDWARE CO., INC.**
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

**E. A. RAINOLD, INC.**
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

# THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 20 NEW ORLEANS, LA., AUGUST 15, 1942 No. 22

Chemistry Library
Louisiana State University
University, La.

New Seed Cane C. P. 34-120 is being released this year for commercial planting. A description of this seed cane was given on the first page of the *Sugar Bulletin* of July 1st.

In our August 1st issue we printed on a perforated sheet which may be detached, a special form on which orders for this seed cane will be received in this office. Additional order forms may be secured by mailing a request on a post card.

The seed cane is growing in seventy-four locations in the cane belt and every effort will be made to have distribution as close to the origin or plot as reasonably possible.

Be sure that your order is post-marked not later than September 5th, 1942.

THE SUGAR BULLETIN

414 Whitney Bldg., New Orleans

Marcel J. Voorhies, Editor
Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
Subscription Price, 50 Cents per Year.

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE
President, W. C. Kemper, Franklin, La.
1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

EXECUTIVE COMMITTEE
W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

# Marketing Our 1942 Crop

*(By C. J. Bourg)*

The WPB meetings held in New Orleans on July 27th and 28th gave a demonstration of the working of the democratic processes at their sincere best. The Washington officials met with sugarcane growers, raw sugar processors, and refiners. The chief subject of discussion was the allocation of the Louisiana and Florida crops of raw sugar to refiners which may become necessary because of the allocation of offshore sugars to refiners and because it is the present plan that during the normal marketing season for Louisiana raw sugars (October-March) no offshore raws will be shipped into Louisiana as long as there are Louisiana raw sugars on the market.

It is planned to appoint an advisory committee on raw sugar allocations, composed of representatives of the sugarcane growers, of the raw sugar processors, and of the refiners. The chairman of the committee will be a WPB official, who will come to New Orleans for the purpose of discussing all the problems connected with the marketing of the Louisiana crop. The committee will be advisory but it will be in a position to make recommendations to WPB covering all features of the marketing problems which are under the direction of Government agencies in Washington.

As a result of the discussions held at New Orleans, some progress has already been made towards the easing of difficulties which might occur in connection with (1) the use of second-hand bags now in this country; (2) the avoidance, as far as possible, of any interference in the normal negotiations for the sale of raw sugar to refiners, so that "business as usual" can be followed as long as equality in distribution is maintained from the standpoint of refiners as well as processors; (3) the establishment of an f.o.b. factory price or the absorption of freight on raw sugar from factories to refineries in the same manner as is being done by the Defense Supplies Corporation in the case of offshore raws being shipped by rail from Florida to Louisiana.

In connection with the marketing of the Louisiana crop, the American Sugar Cane League has also made some progress towards facilitating the movement of molasses, which is subject to allocations as well as to the regulations on tank-cars issued by the Office of Defense Transportation. Efforts are being made to secure permits in advance for the movement of molasses in tank-cars from the plantation to the New Orleans shipping area. The question of tank storage is also one which must be answered, in order to guarantee the efficient marketing of the molasses crop.

In order to avoid the experience of last year, the League has for several weeks been presenting to officials of OPA directly and through Members of our Congressional Delegation the necessity of arriving at a ceiling price on sugar prior to the beginning of the grinding season. Last year the price was changed in January, based upon the price obtained for the entire Cuban crop, which meant that Louisiana and the beet area were deprived of full participation. OPA officials have given the assurance that a re-study of the price schedules of all grades of sugar and molasses is now going on, and it is probable that an announcement will be forthcoming within the next thirty days. Such a decision on price ceilings would remove the uncertainties which beset the movement of the crop last year and would help to solve many of the vexing questions involved in the sale of raw sugar.

# Mainland Sugarcane Area Wage and Price Hearings Scheduled

The Department of Agriculture announced August 10th that public hearings will be held this month in Louisiana and Florida for the purpose of receiving evidence on fair prices for the 1942 crop of sugarcane and on wage rates for persons employed in the harvesting of sugarcane during the period September 1, 1942-June 30, 1943, and in the planting and cultivating of sugarcane in 1943.

The Sugar Act requires that in order to qualify for payments, producers must pay wages at rates not less than those determined to be fair and reasonable by the Secretary of Agriculture, after public hearings and investigation. The Act also provides that processors, who, as producers, wish to qualify for conditional payments, purchase sugarcane at rates determined by the Secretary to be fair and reasonable.

The Sugar Agency of the Agricultural Conservation and Adjustment Administration said that the hearings will be held as follows:

August 19—Baton Rouge, Louisiana, Room 302, Court House.

August 21—New Iberia, Louisiana, Court Room, New Court House.

August 25—Clewiston, Florida, Clewiston High School Auditorium.

The Louisiana hearings will start at 9:30 a.m. and the one in Florida at 9:00 a.m.

The presiding officers will be Joshua Bernhardt, Charles M. Nicholson, Harry H. Simpson, and G. Laguardia.

## Rationing Rules Simplified

A simplified system of issuing Sugar Purchase Certificates to industrial users who make numerous deliveries to certain exempt government agencies was announced recently by the Office of Price Administration in Amendment No. 7 to Rationing Order No. 3.

Instead of requiring an industrial user to present receipts of each delivery made, local War Price And Rationing Boards may accept other evidence of the deliveries.

The OPA suggested to local boards that they accept statements of Certified Public Accountants not affiliated with the applicant's company in lieu of receipts. Receipts are, of course, still acceptable as evidence of delivery, and such receipts will be required of companies which do not make numerous deliveries to exempt agencies.

Industrial users who deliver products to the army, navy and certain other government agencies are entitled to sugar to replace that used in such products. Receipts have been required as evidence of the amount of sugar containing products delivered.

The OPA said the new system should help relieve the work of the local boards.

The new Amendment also contains a provision which enables consumers to obtain sugar for the home canning of fruit juices on the same basis that sugar is now allowed for the home canning of fruits—one pound for each four quarts.

## Procedure for Getting Priorities on Emergency Materials

As the harvest season will soon be here and sugar-processing operations will begin, the following procedure should be memorized in case of a breakdown (which we hope will not happen to anybody). We suggest that you file this information in the most convenient place for ready reference.

The procurement of emergency repair materials can be expedited if the processor concerned will communicate by wire directly with Mr. C. Muirhead, Maintenance and Repair Branch, WPB, Wing 4, Third Floor, Temporary E, Washington, D. C. (Mr. Muirehead's telephone number is Republic 7500, Extension 2337.) The wire should contain the following information:

1. Material or parts required
2. Value
3. Supplier's name and address
4. Delivery date required
5. Rating required
6. Description of product manufactured and its relationship to the war effort
7. A concise statement of the emergency
8. Percentage of shut-down or curtailment or imminence thereof.
9. If emergency required uses of some critical material, wire must contain statement that no suitable substitute is available.

## Raw Sugar Allocations

The entire year's allocation to American refiners of raw cane sugar, both imported and domestic, is provided for in an Amendment of Supplementary Order M-98-a issued by the Director-General for Operations of WPB.

The Amendment supplements the former allocation which covered the first nine months of 1942, and covers the entire year. The raw sugar allocated for the last three months of the year is substantially at the same rate as the allocation for the first nine months:

In addition, the new order makes two changes in the raw sugar allocation program:

1. It brings domestic cane, grown in Louisiana and Florida, into the allocation program. The former order did not include the domestic cane crop, because the bulk of the 1941 crop had been marketed and the 1942 crop had not yet been produced when the nine-month allocation was made.

2. It requires specific authorization from WPB to receive Hawaiian sugar coming to the East Coast. Under the original order no authorization was required for receiving Hawaiian sugar at any coast.

The WPB Sugar Section announced that a hearing for sugar cane producers and growers will be held at New Orleans late in August to discuss the problems arising out of the placing of domestic cane under the allocation program.

While domestic cane was not included in the former allocation, the amount of imported sugar allocated for the nine-month period took the domestic cane into account. Therefore, today's allocation which includes the domestic crop does not mean a corresponding increase in the allocation for the remaining three months of 1942.

The year's allocation amounts to approximately 70 percent of the amount of imported and domestic raw cane sugar refined in 1941, which was a high year. It amounts to approximately 85 percent of the cane sugar refined annually during the three year period immediately preceding 1941.

The allocations were as follows:

| | Short tons, raw value |
|---|---|
| American Sugar Refining Company | 928,598 |
| J. Aron and Company, Inc. | 33,729 |
| C & H Sugar Refining Corporation: | |
| West Coast | 390,376 |
| East Coast | 130,944 |
| Colonial Sugars, Inc. | 123,968 |
| Godchaux Sugars, Inc. | 155,856 |
| Henderson Sugar Refinery, Inc. | 70,311 |
| Imperial Sugar Company | 116,308 |
| Inland Sugar Company | 0 |
| Liquid Sugars, Inc. | 9,715 |
| W. J. McCahan Sugar Refining and Molasses Company | 163,406 |
| National Sugar Refining Company | 791,218 |
| Pepsi-Cola Company | 0 |
| Realty Operators, Inc. | 0 |
| Refined Syrups & Sugars, Inc. | 106,715 |
| Revere Sugar Refinery | 157,790 |
| Savannah Sugar Refining Corporation | 166,171 |
| South Coast Sugar Corporation | 21,318 |
| Sterling Sugars, Inc. | 17,599 |
| Sucrest Corporation & Affiliates | 99,353 |
| Tea Garden Products Company | 652 |
| Western Sugar Refinery: | |
| West Coast | 95,948 |
| East Coast | 61,237 |

## Industrial and Institutional Allotments

Previously announced increases in the sugar allotments of industrial and institutional users for the months of July and August will be extended to cover the allotment period of September and October, the Office of Price Administration announced on August 3.

Authorization for the increases in both allotment periods was contained in Amendment 6 to Rationing Order 3, issued August 3.

Industrial users will be given a 10 per cent increase, which will raise their allotment to 80 per cent of their sugar base for these four months, while institutional users will be granted a 25 per cent increase, boosting their allotment to 75 per cent of their base.

According to OPA the increase to industrial and institutional users for the four-month period will amount to approximately 160,000 short tons, refined value.

Sugar Purchase Certificates for the additional allotments will be granted the institutional or industrial user when he applies for his regular allotment for the September-October period. Local Boards were authorized to accept applications for this period any time after August 7. No special application is required for this increase.

## Mr. Carl F. Dahlberg

The Executive Committee of the American Sugar Cane League has unanimously adopted the following resolution regretting the untimely death of Mr. Carl F. Dahlberg.

WHEREAS, the name of Mr. Carl F. Dahlberg has been joined to the long list of members of the Executive Committee of the American Sugar Cane League who have died since the organization was established twenty years ago and

WHEREAS, Mr. Dahlberg added to the office which he held unusual distinction and contributed in very many ways to the advancement of the League's work and to the solution of the numerous problems with which its Executive Committee is continuously confronted and

WHEREAS, he brought to this public spirited task outstanding ability, sound judgment and ripe experience and gave himself wholeheartedly and unselfishly to every endeavor tendering to benefit the Louisiana sugar industry as a whole, therefore be it

RESOLVED, that the Executive Committee now officially deplores Mr. Carl F. Dahlberg's untimely death which occurred when he was at the height of his usefulness to our community and while he was exerting himself beyond the limits of his physical resources in behalf of those among whom he had cast his lot and chosen his career and be it further

RESOLVED, that a copy of this resolution be sent to Mr. Dahlberg's family and to the Board of Directors of the South Coast Corporation whose presiding officer he was at the time of his death.

## Summary of Results of the Time-of-Planting Tests with Sugarcane in Louisiana

*(By George Arceneaux, Agronomist, Division of Sugar Plant Investigations, Bureau of Plant Industry, United States Department of Agriculture)*

Sugarcane in Louisiana is usually planted during the fall. Germination and some growth ordinarily occur prior to the first killing freeze following which the young plants, which are commonly killed back to the ground surface, remain more or less dormant until growth is resumed in the spring. The practice of protecting the seed cane in banks or windrows during winter months and planting in the spring has been largely abandoned.

Results of studies previously reported[1] show that, under our conditions, time of planting has an important influence on stands and yields of cane and sugar, and indicate that different varieties may be affected differently.

Table 1 summarizes results of time-of-planting tests extending from early August to late January conducted at the field station at Houma during the period 1931-1941 inclusive. Tests of P.O.J. 36-M were confined to the period 1931-35 while tests of C.P. 807 extended from 1931 to 1937 and tests of C.P. 29/320 from 1937 to 1941. The most extensive results are available on the varieties Co. 290 and C.P. 28/19 which were tested in 7 series of annual plantings. Tests of Co. 281 were conducted in 6 such series.

Each test was ordinarily replicated 5 times on plots of 1/80 acre. At harvest, the plots were weighed separately and a 15-stalk sample of cane was taken from each one for juice analysis. Sugar yields were calculated according to methods described in a previous publication.[2] Yield measurements were made on plant cane, first and second stubble and each value given in table 1 is the total of the 3 crops.

For reasons which are generally well recognized, prevailing weather conditions will have an important bearing on results to be obtained from any given planting date. Therefore the significance of mean values given in table 1 will depend greatly on whether the range of weather conditions prevailing in individual cases may be regarded as representative. The comparison of results between varieties is further complicated by the fact that tests with different varieties do not, in all cases, cover the same period of years. It is felt that results obtained with C.P. 28/19, Co. 290, Co. 281 and possibly C.P. 807 are sufficiently extensive to give representative trends in mean results. Average results obtained with P.O.J. 36-M and C.P. 28/320 are based on relatively few tests and are therefore less conclusive.

In comparing results obtained from plantings made at different dates it may be assumed that planting on October 1 is more or less typical of current practices and results obtained from this planting date have been taken as the standard for the purpose of comparison.

The planting of sugarcane in the late summer (August 1-15) has attracted much attention in Louisiana during recent years. In agreement with results obtained in commercial plantings, C.P. 28/19 (table 1) displayed the greatest adaptability to summer planting of any of the varieties tested. In each of 7 comparisons involving this variety, early August

**TABLE 1. Summary of results of Date of Planting tests with six varieties of sugarcane during the period 1931-1941, inclusive.**

| Date of Planting | Indicated yield of 96° sugar per acre—total of plant cane, first and second stubble (pounds) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1931 32 33 | 1933 34 35 | 1934 35 36 | 1935 36 37 | 1936 37 38 | 1937 38 39 | 1938 39 40 | 1939 40 41 | Mean | Average gain (+) or loss (—) as compared with Oct. 1 planting |
| **P. O. J. 36-M** | | | | | | | | | | |
| August 1-15 | 10715 | 2701 | | | | | | | 6708 | —3642 |
| September 1-15 | 8407 | 3898 | | | | | | | 6152 | —4198 |
| October 1 | 11120 | 9580 | | | | | | | 10350 | ------ |
| Oct. 15-Nov. 1 | 12610 | 12469 | | | | | | | 12539 | +2189 |
| January 20-30 | 7726 | 12326 | | | | | | | 10026 | —324 |
| **C. P. 807** | | | | | | | | | | |
| August 1-15 | 17172 | 16200 | 20521 | 19166 | | | | | 18265 | +1356 |
| September 1-15 | 15214 | 18217 | 16514 | 16828 | | | | | 16693 | —216 |
| Oct. 1 | 15739 | 19637 | 15474 | 16785 | | | | | 16909 | ------ |
| Oct. 15-Nov. 1 | 16154 | 19732 | 14374 | 17763 | | | | | 17006 | +97 |
| January 20-30 | 16208 | 19196 | 13842 | 15418 | | | | | 16166 | —743 |
| **Co. 281** | | | | | | | | | | |
| August 1-15 | 16269 | 13773 | 21509 | 15864 | | | 13157 | 11104 | 15279 | +1097 |
| September 1-15 | 13786 | 14334 | 18073 | 16005 | | | 12040 | 11191 | 14238 | +56 |
| October 1 | 15544 | 15091 | 14681 | 15068 | | | 12649 | 12059 | 14182 | ------ |
| Oct. 15-Nov. 1 | 14905 | 15418 | 14215 | 15869 | | | 10701 | 10809 | 13653 | —529 |
| January 20-30 | 15394 | 15725 | 9618 | 13095 | | | 8915 | 7610 | 11726 | —2456 |

**TABLE 1—(Continued**

| Date of Planting | 1933 34 35 | 1934 35 36 | 1935 36 37 | 1936 37 38 | 1937 38 39 | 1938 39 40 | 1939 40 41 | Mean | Average gain (+) or loss (—) as compared with Oct. 1 planting |
|---|---|---|---|---|---|---|---|---|---|
| **Co. 290** | | | | | | | | | |
| August 1-15 | 23481 | 27976 | 22672 | 19853 | 24804 | 21269 | 15538 | 22228 | +1990 |
| September 1-15 | 21656 | 22591 | 21209 | 18933 | 22683 | 20719 | 15330 | 20446 | +208 |
| October 1 | 23840 | 19821 | 20030 | 19510 | 21448 | 21113 | 15906 | 20238 | ------ |
| Oct. 15-Nov. 1 | 24470 | 17841 | 20380 | 18353 | 19777 | 18406 | 15133 | 19194 | —1044 |
| January 20-30 | 22835 | 14819 | 17174 | 17343 | 16329 | 7637 | 10959 | 15299 | —4939 |
| **C. P. 28/19** | | | | | | | | | |
| August 1-15 | 18532 | 24825 | 21241 | 18426 | 23220 | 16321 | 16957 | 19932 | +3101 |
| September 1-15 | 18220 | 21348 | 19820 | 17672 | 17914 | 14778 | 16013 | 17966 | +1135 |
| October 1 | 17818 | 18560 | 18613 | 15715 | 17568 | 16046 | 13495 | 16831 | ------ |
| Oct. 15-Nov. 1 | 19111 | 16048 | 20065 | 16741 | 18174 | 15017 | 14219 | 17054 | +223 |
| January 20-30 | 17800 | 14396 | 15475 | 16516 | 17868 | 10233 | 10554 | 14692 | —2139 |
| **C. P. 29/320** | | | | | | | | | |
| August 1-15 | | | | | 21774 | 13755 | 14655 | 16728 | +946 |
| September 1-15 | | | | | 21316 | 14132 | 12937 | 16128 | +346 |
| October 1 | | | | | 19378 | 14859 | 13108 | 15782 | ------ |
| Oct. 15-Nov. 1 | | | | | 18237 | 11534 | 10195 | 13322 | —2460 |
| January 20-30 | | | | | 18420 | 8206 | 7831 | 11486 | —4296 |

planting maintained an advantage in yield over October 1 planting, the average difference being approximately 1-1/2 tons of sugar per acre in the aggregate of plant cane, first and second stubble.

Summer planting also proved advantageous with Co. 290 as indicated by a favorable average difference of nearly one ton of sugar per acre in comparison with October 1 planting. With the varieties C.P. 29/320, Co. 281 and C.P. 807 the corresponding average differences in favor of summer planting ranged from 946 to 1356 pounds of sugar per acre.

P.O.J. 36-M, on the other hand, gave exceedingly poor results from early August planting (table 1). As reported in a previous publication[3] planting during that period likewise proved unsatisfactory with P.O.J. 213 and P.O.J. 234.

The greatly advanced maturity of the plant cane crop at harvest during the fall of the succeeding year is an important additional advantage to be derived from summer planting. In the average of tests with Co. 290 and C.P. 28/19 extending over a period of 7 years (table 2) early August planting resulted in an average increase of approximately 14 pounds in indicated yield of sugar per ton of cane as compared with October 1 planting. This is fairly typical of results obtained with varieties which have responded favorably to summer planting.

**TABLE 2. Average yearly increase in indicated yield of sugar per ton of plant cane (pounds) obtained from early August planting as compared with October 1 planting with each of two varieties of sugarcane.**

| Variety | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 7-year Mean |
|---|---|---|---|---|---|---|---|---|
| Co. 290 | 7.9 | 16.5 | 10.6 | 7.8 | 33.2 | 9.2 | 12.4 | 13.9 |
| C. P. 28/19 | 1.5 | 5.1 | 4.4 | 25.4 | 31.5 | 15.3 | 15.7 | 14.1 |

As emphasized in an earlier report[4] planting during early September proved dangerous with many of the varieties formerly grown extensively. This is illustrated by the extremely poor results obtained with P.O.J. 36-M. On the other hand, with C.P. 28/19 plantings made during early September showed a substantial advantage over plantings made on October 1 as shown by an average gain of 1135 pounds of sugar per acre. With the varieties Co. 281, Co. 290, C.P. 807 and C.P. 29/320, average results obtained from early September planting did not differ significantly from comparable results obtained from October 1 planting.

Relative yields from plantings made during the period October 15 to November 1 varied widely with different varieties. This period, while the most satisfactory in the case of the now discarded variety P.O.J. 36-M proved relatively unsatisfactory with Co. 290 and C.P. 29/320.

"Spring planting" (January 20-30) was consistently unsatisfactory with all varieties but especially so with Co. 290 and C.P. 29/320 as shown by average decreases of 4939 and 4296 pounds respectively in yield of sugar per acre as compared with October 1 planting.

## Discussion of Results

The large differences in average yield of sugar per acre due to difference in time of planting as revealed in these tests, and especially the evidence obtained with regard to the differential response of the varieties studied, emphasize the importance of a carefully planned planting schedule. But in interpreting the results it will be necessary to take into consideration other factors of importance in plantation economy. For instance a given plot of seed cane will

Left to right:
WARNE BRANDLEY
BOB BRANDLEY
ELMER WINEGARDNER
CHARLES BRANDLEY

"I have used Mobiloil and other Magnolia Products exclusively since 1925, and I used Magnolia Oil in my first tractor in 1918. I have been thoroughly convinced that quality has no substitute, and that's why I use and recommend Magnolia Products."*

Warne Brandley
El Reno, Okla.

★ Giving farm equipment the best possible care has always been a matter of common sense. Today, with the security of our country threatened, it has become a national obligation gladly accepted by every farmer. Each implement and tool on your farm needs to be kept in constant repair and tip-top condition . . . ready to work at any time. Scarcity of farm labor will make it necessary for equipment to operate almost constantly to produce the enormous quantities of food and fibre needed to win this war.

It is the duty of every farmer to make his present equipment last as long as possible.

Your tractors and other machines need the quality you are assured of getting when you buy Mobiloil . . . Mobilgas and other Magnolia Products.

*This is a voluntary statement for which no compensation of any description was given to Mr. Brandley.

B-MF-106

MAGNOLIA AGENTS

Offer immediate delivery of tractor lubricants and fuels

A SOCONY-VACUUM COMPANY

MAGNOLIA PETROLEUM COMPANY


plant a considerably lesser acreage during early August than on October 1, the actual difference depending on the variety and also on the advancement of the crop during the particular year. In order to plant during early August it will be necessary to plow under the preceding legume crop somewhat earlier than the usual time which may in turn reduce the amount of plant food available to the cane crop. Some cultivation to control weeds during fall months will be necessary for the best results from summer planting.

In the case of C.P. 28/19 it is felt that early August planting has been sufficiently satisfactory, from all considerations, to command recognition as an important plantation practice. This is probably true also in the case of Co. 290. With Co. 281, C.P. 807 and C.P. 29/320, yield advantages in favor of summer planting, while considered significant, are not as great as displayed by the first mentioned varieties and should be carefully weighed against objectionable features of this practice.

Frequent rains commonly occurring during late July and early August often interfere with seed bed preparation and planting. In this connection, it has been observed that rows along ditches may often be plowed and planted at times when the remainder of the "cut" is too wet for such operations. Summer planting may prove an exceedingly helpful means of remedying the poor stands commonly grown on ditch bank rows. In addition, the cover afforded during fall months, the early growth during the spring, and the good stands ordinarily obtained from summer planting will give valuable help in suppressing weed growth. It goes without saying that plantings made for this purpose should be placed as close to the ditch as practically possible.[5]

As stated in an earlier report[6] successful results from plantings made well in advance of the winter period depend on the initial growth attaining a relatively advanced stage of development before winter. In that report, data were presented to show that, following germination and early growth of shoots, the sugar in seed pieces is rapidly depleted. This is followed by a marked rise in the concentration of sugar in the juice of seed pieces in cases where the cane makes sufficient growth before the occurrence of winter freezes. Such cane will develop an extensive root system during the fall and will produce numerous shoots which, while killed back during the winter, will resume growth in large numbers during early spring. Under mild winter conditions many of the young shoots and lower joints of the older stalks will escape severe injury because of the protection afforded by surrounding foliage. The large stores of available plant food will permit an early and rapid development of new growth during the spring.

On the other hand, in cases where the pre-winter growth has been relatively extensive yet the stage of development attained not sufficiently advanced to insure the building up of adequate food reserves in seed pieces and protected new growth prior to the first killing freeze, relatively unsatisfactory results have been frequently obtained. Under normal conditions varieties now in commercial cultivation when planted between August 1 and August 15 will reach a very satisfactory stage of development before the onset of winter. However if the first freeze occurs at a relatively early date, or if growth conditions are unfavorable, cane planted even during that period may get caught at an unfavorable stage of development at

the beginning of winter. A similar situation will frequently occur under normal weather conditions with plantings made during late August and early September. For this reason summer planting should be finished by August 15 with most varieties. In the case of C.P. 28/19 however plantings made from September 1-15 have shown some of the advantages characteristic of summer planting. This is no doubt due to the variety's ability to grow and accumulate sugar reserves at relatively rapid rates during fall months. It is interesting to note that, with this variety, planting on October 1 has proved relatively unsatisfactory. This period with C.P. 28/19 probably corresponds to the somewhat earlier period often found unsatisfactory with other varieties.

Co. 290 and C.P. 29/320 planted during late October and early November gave extensively gappy stands due to the rotting of seed pieces. This condition extended to most of the varieties when planted during late January but was especially severe with Co. 290 and C.P. 29/320.

### Summary

Sugarcane varieties now cultivated in Louisiana should be planted sufficiently in advance of winter to permit young shoots to become established before the occurrence of killing freezes. In tests summarized in this report the prevalent practice of planting during late September and early October proved, on the whole, satisfactory. Planting during late October and early November gave relatively poor results with most varieties now in commercial culture and especially with Co. 290 and C.P. 29/320. Results obtained from spring planting were consistently bad with all varieties. In the average of all tests, summer planting was very satisfactory with C.P. 28/19 and Co. 290 and moderately so with Co. 281, C.P. 807 and C.P. 29/320. Planting during late August and early September is not recommended with most varieties but has given good results in the case of C.P. 28/19.

[1]Arceneaux, G., On Time of Planting Sugarcane in Louisiana. Sugar Bull. Vol. 14, No: 21 Aug. 1, 1936.

[2]Arceneaux, G., Gibbens, R. T., Jr., and Krumbhaar, C. C., Variety Tests of Sugarcanes in Louisiana During the Crop Year 1936-37 and Summary of Annual Results 1935-1937. U. S. Dept. Agr. Circ. 531, 27 pp. illus. 1939.

[3]See footnote 1.

[4]See footnote 1.

[5]In an Article "The Ditch Bank Method of Planting Sugar Cane" in The Sugar Bulletin, V. 9, No. 18, June 15, 1930, pp. 4-6, Mr. F. D. Stevens suggested locating rows within 15 to 18 inches of the ditch as a means for suppressing weeds on the banks and in the ditches.

**PAUL, RICE & LEVY**
INCORPORATED

Wholesale

**INDUSTRIAL, MILL & MARINE SUPPLIES**

Day, Ra. 6123 Night, Fr. 2019

501-505 Poydras St.

New Orleans, - - La.

O I C VALVES
GUILD & GARRISON PUMPS
INTERNATIONAL INDUSTRIAL PAINTS
CHESTERTON PACKING
K-TING MANILA ROPE
CONSOL OILS
VULCAN SOOT BLOWERS

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

**Help Our Country**

**Buy**
**WAR BONDS**
**and**
**STAMPS**

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

**LAMBORN & COMPANY, INC.**
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

**LE BOURGEOIS BROKERAGE CO.**
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
**HARRY L. LAWS & CO., Inc.**
Brokers and Distributors
SUGAR and MOLASSES
**SUGAR FUTURES**
American Bank Building New Orleans, La.

**GAY, SULLIVAN & CO., INC.**
SUGAR
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

**STAUFFER, ESHLEMAN & CO., LTD.**
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
**CYANAMID**
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

**INDUSTRIAL LUBRICANTS**

BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
**STANDARD OIL CO. OF LA.**

FOR SUGAR CANE FINANCING
**STATE AGRICULTURAL CREDIT CORPORATION, INC.**
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

**AMERICAN MOLASSES CO.**
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LeGardeur Lloyd R. Marks
**R. J. LEGARDEUR & COMPANY**
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

**PENICK & FORD, LTD., INCORPORATED**
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

**STANDARD SUPPLY AND HARDWARE CO., INC.**
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

**E. A. RAINOLD, INC.**
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

# THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.

We stand for the encouragement of Home Industries as against foreign Competition

Chemistry Library, Louisiana State University, [illegible]

Vol. 20 NEW ORLEANS, LA., SEPTEMBER 1, 1942 No. 23

New Seed Cane C. P. 34-120 is being released this year for commercial planting. A description of this seed cane was given on the first page of the *Sugar Bulletin* of July 1st.

In our August 1st issue we printed on a perforated sheet which may be detached, a special form on which orders for this seed cane will be received in this office. Additional order forms may be secured by mailing a request on a post card.

The seed cane is growing in seventy-four locations in the cane belt and every effort will be made to have distribution as close to the origin or plot as reasonably possible.

Be sure that your order is post-marked not later than September 5th, 1942.

THE SUGAR BULLETIN

414 Whitney Bldg., New Orleans

Marcel J. Voorhies, Editor
Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
Subscription Price, 50 Cents per Year.

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE
**President, W. C. Kemper, Franklin, La.**
1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

**EXECUTIVE COMMITTEE**
W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

# OPA Explains Rationing Plans

*(By C. J. Bourg)*

The Office of Price Administration has made the announcement that the government's sugar rationing program is operating on a basis that will make possible the maintenance of allotments to consumers through the first nine months of 1943 at least equal to those at the beginning of rationing, providing the shipping outlook in the Caribbean does not take a radical turn for the worse.

The analysis of the U. S. sugar supply, compiled under direction of Harold B. Rowe, chief of the food rationing division, included estimates that to maintain the minimum ration through the first nine months of 1943 will require the distribution of 4,173,000 tons of sugar, but that an additional 830,000 tons will have to be kept in the nation's sugar larder to insure an adequate supply in all sections of the country.

While the shipping outlook is a highly uncertain factor, Rowe's report said, it appears unlikely that receipts from Caribbean sources of supply will exceed a rate equal to the quotas established by the Interdepartmental Shipping Priorities Committee for the period of June 1 to December 31 of this year, which totalled 1,742,000 tons from Cuba, Puerto Rico and the Virgin Islands and other sources.

This rate of import would provide 2,240,000 tons during the first nine months of 1943, Mr. Rowe said, with other anticipated supplies listed as:

From Hawaii, 600,000 tons.

From the U. S. beet sugar crop in early 1943, 200,000 tons.

These receipts aggregate 3,040,000 tons, and since the total needed for the nine-months' distribution is 5 million tons, we must go into the new year with at least 1,960,000 tons of sugar on hand.

"It must be recognized," the report said, "that this inventory would be adequate only in the event receipts during the first nine months of 1943 equalled the full rate of the present shipping quota. Since this rate of receipts is not certain, a further reserve is desirable."

Accordingly, it has been concluded, Mr. Rowe said, that a year-end stock of 2,300,000 tons would represent a reasonable compromise between actual danger of shortage in the country, and an excessive use of warehouse space now so sorely needed for our war production program.

The ration allowances for the remainder of this year, Mr. Rowe revealed, are being gauged to provide for this necessary stock on hand for January 1. He pointed out that if the shipping situation turns out to be better than we now have the right to expect, or if distribution is less than expected, any excess supply of sugar can then be distributed as a bonus, or extra allowance to consumers.

In addition to revealing the sugar rationing policies and objectives of OPA, Rowe's report reviewed the whole program of U. S. control of sugar distribution, and the economic basis underlying these rationing policies. It asserted that the total amount of sugar estimated to be available from all off-shore sources in 1942 was fully a third less than in 1941, and 25 percent lower than the average receipts for the three years previous.

The report also described the steps taken by OPA to insure equal distribution of our sugar stocks over the country in the face of great dislocations in the normal supply routes.

This control of distribution of sugar stocks, the report said, has reduced the necessity for cross-hauling of sugar, thus relieving a great burden on our already severely taxed railroad facilities.

# Ration Remains Same

Consumers may purchase five pounds of sugar upon the surrender of Stamp No. 8 in War Ration Books during the ten-week period beginning August 23 and ending October 31st.

This is a larger amount of sugar and a longer ration period than have been assigned any previous stamp but will require individual consumers to use sugar at the original rate of a half pound per week.

In announcing this action, the OPA said it would enable individual consumers to make their sugar purchasers in larger unit and also facilitate the disposal of five, ten and 25 pound packages.

Packages of these sizes were put up last fall and winter before it was known that rationing would be necessary and processors have had difficulty marketing any substantial part of them inasmuch as ration stamps to date have been valid for one or two pound purchases.

Unless this sugar is sold, it would have to be repacked, thereby causing an undesirable waste of labor and materials, according to the OPA.

Currently the heaviest consumer demand has been for the two-pound size package which had only a limited sale in the past. Assigning the value of five pounds to stamp No. 8 will make it possible to save

the extra labor, materials and equipment that might otherwise be necessary to put up two-pound packages.

The value of Stamp No. 8 is fixed in Amendment No. 8 to Rationing Order No. 3. Stamps Nos. 6 and 7 which were used for the purchase of two pounds of sugar, expired at midnight of August 22.

TITLE 32—NATIONAL DEFENSE
CHAPTER XI—OFFICE OF PRICE ADMINISTRATION
Part 1407—Rationing of Food and Food Products
AMENDMENT NO. 8 TO RATIONING ORDER NO. 3 SUGAR RATIONING REGULATIONS

A new item is added to Section 1407.243, as set forth below:

SCHEDULES:

1407.243 Schedule C: Designation of ration periods and weight value of Stamps valid therein.

| Ration Period | Stamp valid during ration period | Weight value of Stamp |
|---|---|---|
| No. 8 (August 23 to October 31, 1942) | Stamp No. 8 | 5 pounds |

## Watch Those Truck Tires!

Tire quotas are being allocated each month by counties (parishes) based upon the registration and usage of motor vehicles. OPA states that the harvest of sugarcane and sugar beets is accepted as an indication of peak usage during October, November, and December, in those counties or parishes where sugarcane or sugar beets are grown.

As written before, OPA advises farmers and owners of trucks used in the transportation of farm products to have their tires examined before the harvest season begins. OPA also advises that the need for recapped tires should be anticipated before the first of each month by submitting an application to the local rationing board. Often the number of applications exceeds the monthly quota and makes it more difficult for the farmer or truck owner to obtain a certificate until the following month.

If you are in doubt as to the condition of the tires on your truck, you should have them inspected. The grower must take the initiative in seeking to get a recap certificate. He must surrender the carcass of the used tire for recapping. In some cases, he may obtain a tire already recapped; but, in most cases, he will have to wait until the carcass he surrenders is recapped and returned to him.

### Warnings

To overload your truck more than 20% above capacity is in violation of ODT 17.

Driving your trucks in excess of 40 m.p.h. is in violation of ODT 17.

Keep your tires properly inflated. Have minor injuries promptly corrected.

Tires should be inspected for retreads before the tread is worn off.

Inspection should be requested just as the anti-skid tread becomes worn off and has a smooth appearance. Do not wait for the fabric to show.

## Recaps For Overseers and Executives

In connection with obtaining recapped tires for supervisory employees, an OPA official has directed our attention to Section 504 (a)(3)(i) of the Tire Rationing Regulations (Revised).

When applying to the local rationing board, you should cite Section 504 (a)(3) as the basis of eligibility:

"Sec. 504. (3) Transportation of executives, engineers, technicians, and workers, to and from, or within, such of the following as are essential to the war effort: Power generation or transmission facilities, transportation or communication facilities, or agricultural, extractive, industrial, military, or naval establishments.

"(i) Certificates may be granted under this paragraph (a)(3) to *workers,* including *supervisory employees,* who require passenger automobiles for transportation *from their residences to factories,* power plants, transportation or communication facilities, *farms,* lumber camps, mines, military or naval establishments, or similar places of employment when the work done at such places of employment is essential, directly or indirectly, to the prosecution of the war. * * * "

## Price of Fertilizer

1367.62 Effective Date. This Maximum Price Regulation No. 205 (1367.51 to 1367.63 inclusive) shall become effective August 22, 1942.

1367.63 Appendix A: Maximum Prices for sulphate of ammonia. (a) Except as provided in paragraphs (b), (c), (d), (e) and (f) of this section, the maximum price a producer, importer or primary jobber may charge for sulphate of ammonia shall be the lower of the following prices:

(1) The base price of $28.20 per ton at inland oven, plus the transportation charges to buyer's destination from the inland oven nearest to such destination; or

(2) The base price of $29.20 per ton at port, plus the transportation charges to buyer's destination from the port nearest to such destination.

* * * * *

(f) Bags and bagging. Whenever the producer, importer, or primary jobber sells sulphate of ammonia in bags, there may be added to the maximum prices permitted by paragraphs (a), (b), (c), (d), and (e) above, the sum of $1.00 together with the cost of the bags.

### League Thanks Dr. Groggins

May 20, 1942

*Dr. Philip H. Groggins, Chief,*
*Chemicals Section,*
*Office for Agricultural War Relations,*
*Washington, D. C.*
*Dear Dr. Groggins:*

I am pleased to forward to you the Resolution of the American Sugar Cane League expressing its appreciation for the effective service given to the sugarcane growers of Louisiana on fertilizer for the 1942 crop. The growers received enough fertilizer to fill their needs, and the prospect is that Louisiana will have its greatest production this year.

We are informed that a small quantity of sodium nitrate intended for sugarcane growers was diverted to other farmers in the absence of demand. In order that the situation may be well understood, I would like to review the facts briefly for your information and records. The Louisiana sugar industry anticipated its needs and cooperated with your office in making estimates. With an increased acreage and a large stubble crop, the demands for early delivery of fertilizer were considerable. There were all sorts of rumors of shortages of fertilizer and scarcity of ships to bring nitrate from Chile; therefore, many sugarcane growers yielded to fears, and some of them bought mixed fertilizers instead of waiting for the de-

liveries of sodium nitrate. Others abandoned the poorer stubbles.

You will also remember that, at your request, we agreed to the postponement to April 15th of the delivery of fertilizers in March, in order that adjustments might be made for other farmers. Fertilizer is normally applied in sugarcane fields prior to April 1st. All of these conditions created uncertainty and change of plans which explain how it has happened that all of the nitrate earmarked for the sugar belt was not used.

I can give every assurance that the full estimate of requirements would have been taken, if the uncertainties had not existed and there had been no extraordinary delay in deliveries. I am sure you appreciate all of these facts, but we consider it important to record them so that the incident may not affect in any way the prospects for obtaining fertilizer for the 1943 crop.

Thanking you personally for your cooperative spirit, I am

Very truly yours,
C. J. Bourg, V. Pres.

UNITED STATES DEPARTMENT OF AGRICULTURE
Office for Agricultural War Relations
Washington

May 22, 1942

*Mr. C. J. Bourg, Vice President*
*American Sugar Cane League*
*of the U.S.A.*
*Union Trust Building*
*Washington, D. C.*
*Dear Mr. Bourg*:

I am deeply moved by the resolution of the American Sugar Cane League which was transmitted with your letter of May 20.

It is gratifying to know that our efforts have been instrumental in aiding an important segment of American Agriculture. Although cooperation on our part is an official responsibility we nevertheless appreciate learning that our office has been instrumental in rendering an effective and beneficial service.

We are now making plans for the distribution of nitrogenous fertilizers for the 1942-43 season, and it would be very appropriate for you to let me have an estimate of your requirements. We want to assure you that your needs will be viewed sympathetically and that adequate representations for a reasonable allocation will be made.

With best wishes and personal regards, I am

Yours very truly,
/S/ P. H. Groggins
Chief, Chemicals Division

# Beet Sugar for Kentucky and Tennessee

Acting to assure adequate sugar supplies for consumers in Tennessee and Kentucky, the Office of Price Administration authorized eight Western beet processors and one West Coast cane refiner to distribute in those States, which ordinarily they do not serve.

The authorization carries with it an assurance to the refiners that Defense Supplies Corporation will reimburse them for the excess freight costs entailed.

This action was necessary, it was stated, because supplies of sugar in the hands of Gulf refiners who normally supply Tennessee and Kentucky are at present not adequate to meet this demand. The short supply reflects the critical shipping situation which holds down receipts from off-shore areas.

# More Sugar For Hospitals

Hospitals principally engaged in care of persons acutely ill will be able to provide patients the same amounts of sugar used last year, as a result of a change in the sugar rationing regulations announced by the Office of Price Administration.

Amendment No. 9 to Rationing Order No. 3 authorizes hospitals of that kind to obtain 65% of the sugar base they have established for meals and food services, instead of 50% as heretofore, starting with the September-October allotment period.

Added to this will be the so-called "bonus" allotment, amounting to 25% of the base, which will be available to all classes of institutional users for the September-October period. Thus the hospital allotment—65% plus the 25% "bonus"—will amount to 90% of the base for the September-October period. By holding down their use of sugar for non-patients (members of the staff and others who eat at the hospital) to the 75% level to which restaurants or other eating places are limited in this period, the hospitals will have enough sugar to provide patients with the full amounts they allowed to patients a year ago.

To qualify for the bigger allotment, a hospital must show that it is principally engaged in care of patients who are acutely ill and who temporarily live within the hospital for medical or surgical care. A hospital principally treating chronic cases or mental illnesses, and an institution such as a rest home or sanitarium is not eligible. Application for the September-October allotment which will include the increase, may be made anytime before September 5. Effective date of the amendment is September 2.

PART 1407—RATIONING OF FOOD AND FOOD PRODUCTS

(Amendment 9 to Rationing Order 3)

SUGAR RATIONING REGULATIONS

Paragraph (a) of § 1407.86 is amended as set forth below:

*Institutional and Industrial Users*

§ 1407.86 *Allotments.* (a) A registering unit which uses sugar for any of the purposes not enumerated in § 1407.241, Schedule A of Rationing Order No. 3, and which has established a sugar base by registration on OPA Form No. R-310, is eligible for an amount of sugar for each of such purposes which is known as an allotment. The amount of an allotment for each period for which application is made shall be the applicable percentage specified in § 1407.242, Schedule B of Rationing Order No. 3, of the sugar base, except that in the case of an establishment principally engaged in the care of persons who are acutely ill and temporarily living and receiving medical or surgical care therein, the amount of the allotment for meals or food services for each period commencing on or after September 1, 1942, shall be 65 per cent of the sugar base for such purpose.

*Effective Date*

§ 1407.222 *Effective dates of amendments.* * * * (i) Amendment No. 9 (Paragraph (a) of § 1407.86) shall become effective September 2, 1942.

(Pub. Law 421, 77th Cong., W. P. B., Dir. No. 1 and Supp. Dir. 1E)

Issued this 27th day of August 1942.

LEON HENDERSON,
*Administrator.*

# Salvage for Victory Program

The American Industries Salvage Committee, organized and maintained by American industries, is actively cooperating with the War Production Board to encourage the salvage of all waste materials in the neighborhood of industrial plants. Something over four hundred communities have been organized for this important work, which is intended to continue for the duration of the war.

Mr. Wallace C. Kemper, President of the American Sugar Cane League, is Chairman of the Salvage for Victory Division of the Sugar Cane Industry.

As a guide to you and perhaps as an inspiration to undertake this work, we are listing below the activities of Mr. Harry D. Smedes, of the Oasis Sugar Factory at Cade, La. It is hoped that all of the Louisiana sugar mills will undertake salvage programs on this order and make a real contribution to our all-out war effort.

Mr. Smedes is paying for the salvaged material on the basis of Salvage for Victory prices. He sells the steel, cast iron and tin to the Lake Charles Bag and Salvage Company, of New Iberia, and the rubber to a filling station in St. Martinville. All of the material goes over his scales at the factory.

The following individuals have delivered material to Mr. Smedes:

| Name | Scrap & Cast Iron | Copper | Brass | Tin | Rubber |
|---|---|---|---|---|---|
| V. A. Gondron | 1,140 | | | | |
| Ulysses Trahan | 160 | | | | |
| George Burke | 185 | | | 610 | |
| Fernest Lopez | 1,790 | | | | |
| Abrard Broussard | 240 | | | 210 | |
| Israel Romero | 580 | | | 590 | |
| Ozeme Boudreaux | 5,500 | | | 390 | |
| Martial Boudreaux | | | | | 300 |
| Calton Wilson | | | | 220 | |
| Nicholas Wilson | | | | 330 | |
| George Robinson | | | | | 80 |
| Westley Bienvenu | 560 | | | 600 | |
| Alger David | 1,420 | | | 800 | |
| Murphy Jean Batist | 1,270 | | | 150 | |
| Dudley Celestin | 1,000 | | | | |
| Robert Cormier | 1,420 | | | 280 | |
| Ulysses Lawrence | 780 | | | 770 | |
| Cornelius Mouton | | | | 1,000 | |
| Dudley Celestin | 430 | | | 250 | |
| Cornelius Mouton | 430 | | | 1,000 | |
| Elias Viator | 2,385 | | | 670 | 55 |
| Junius Mathiew | 450 | | | 260 | |
| Lawrence Mitchel | 450 | | | 320 | 80 |
| Willis Mitchel | | | | 500 | |
| Frank Broussard | 950 | | | 600 | |
| Robert Reed | 250 | | | | 30 |
| Arthur Jean Batist | 500 | | | 150 | |
| Kenwood Viator | 150 | | | 1,000 | |
| V. A. Gondron | 500 | | | 600 | 165 |
| Armond Delahoussaye | 400 | | | | |
| Anatole St. Julien | 790 | | | 210 | |
| Ozeme Boudreaux | 500 | | | | 150 |
| Remie Comeaux | 670 | | | | |
| Miscellaneous | 2,320 | | | 2,155 | 200 |
| Smedes Bros. Inc. | 6,220 | 880 | 147 | | 355 |

TOTALS SOLD:

| | | |
|---|---|---|
| Rubber | 2,110 | pounds |
| Brass | 147 | " |
| Copper | 880 | " |
| Cast Iron | 21,890 | " |
| Scrap Iron | 26,970 | " |
| Steel | 4,420 | " |
| Tin | 10,040 | " |

## U. S. RETAIL PRICE OF REFINED SUGAR AND ITS COMPONENT PARTS*

### Annual Averages—in cents per pound—1900-1941

| Calendar Year | Raw Sugar C & F Basis New York | Average Duty | Raw Sugar Duty Paid at New York | Refiners' Theoretical Margin | Refined Cane Sugar Net Cash at New York | Processing Tax† | Distributors' and Retailers' Spread | Retail Price | Calendar Year |
|---|---|---|---|---|---|---|---|---|---|
| 1900 | 2.881 | 1.685 | 4.566 | .754 | 5.320 | ------ | .780 | 6.1 | 1900 |
| 1901 | 2.364 | 1.685 | 4.049 | 1.001 | 5.050 | ------ | .950 | 6.0 | 1901 |
| 1902 | 1.857 | 1.685 | 3.542 | .913 | 4.455 | ------ | 1.145 | 5.6 | 1902 |
| 1903 | 2.068 | 1.685 | 3.753 | .885 | 4.638 | ------ | .962 | 5.6 | 1903 |
| 1904 | 2.622 | 1.348 | 3.970 | .802 | 4.772 | ------ | 1.128 | 5.9 | 1904 |
| 1905 | 2.930 | 1.348 | 4.278 | .978 | 5.256 | ------ | .744 | 6.0 | 1905 |
| 1906 | 2.338 | 1.348 | 3.686 | .829 | 4.515 | ------ | 1.185 | 5.7 | 1906 |
| 1907 | 2.401 | 1.348 | 3.749 | .900 | 4.649 | ------ | 1.151 | 5.8 | 1907 |
| 1908 | 2.716 | 1.348 | 4.064 | .893 | 4.957 | ------ | .943 | 5.9 | 1908 |
| 1909 | 2.649 | 1.348 | 3.997 | .768 | 4.765 | ------ | 1.135 | 5.9 | 1909 |
| 1910 | 2.850 | 1.348 | 4.198 | .774 | 4.972 | ------ | 1.028 | 6.0 | 1910 |
| 1911 | 3.031 | 1.348 | 4.379 | .966 | 5.345 | ------ | .755 | 6.1 | 1911 |
| 1912 | 2.865 | 1.348 | 4.213 | .828 | 5.041 | ------ | 1.259 | 6.3 | 1912 |
| 1913 | 2.220 | 1.348 | 3.568 | .710 | 4.278 | ------ | 1.222 | 5.5 | 1913 |
| 1914 | 2.830 | 1.062 | 3.892 | .791 | 4.683 | ------ | 1.217 | 5.9 | 1914 |
| 1915 | 3.593 | 1.0048 | 4.598 | .961 | 5.559 | ------ | 1.041 | 6.6 | 1915 |
| 1916 | 4.778 | 1.0048 | 5.783 | 1.079 | 6.862 | ------ | 1.138 | 8.0 | 1916 |
| 1917 | 5.217 | 1.0048 | 6.222 | 1.441 | 7.663 | ------ | 1.637 | 9.3 | 1917 |
| 1918 | 5.487 | 1.0048 | 6.492 | 1.342 | 7.834 | ------ | 1.866 | 9.7 | 1918 |
| 1919 | 6.650 | 1.0048 | 7.655 | 1.340 | 8.995 | ------ | 2.305 | 11.3 | 1919 |
| 1920 | 11.350 | 1.0048 | 12.355 | 2.895 | 15.250 | ------ | 4.150 | 19.4 | 1920 |
| 1921 | 3.364 | 1.352 | 4.716 | 1.474 | 6.190 | ------ | 1.810 | 8.0 | 1921 |
| 1922 | 3.005 | 1.6412 | 4.646 | 1.284 | 5.930 | ------ | 1.370 | 7.3 | 1922 |
| 1923 | 5.278 | 1.7648 | 7.043 | 1.365 | 8.408 | ------ | 1.692 | 10.1 | 1923 |
| 1924 | 4.174 | 1.7648 | 5.939 | 1.373 | 7.312 | ------ | 1.888 | 9.2 | 1924 |
| 1925 | 2.565 | 1.7648 | 4.330 | 1.118 | 5.448 | ------ | 1.752 | 7.2 | 1925 |
| 1926 | 2.565 | 1.7648 | 4.330 | 1.133 | 5.463 | ------ | 1.437 | 6.9 | 1926 |
| 1927 | 2.948 | 1.7648 | 4.713 | 1.081 | 5.794 | ------ | 1.506 | 7.3 | 1927 |
| 1928 | 4.434 | 1.7648 | 4.199 | 1.325 | 5.524 | ------ | 1.576 | 7.1 | 1928 |
| 1929 | 1.993 | 1.7648 | 3.758 | 1.274 | 5.032 | ------ | 1.568 | 6.6 | 1929 |
| 1930 | 1.471 | 1.89 | 3.363 | 1.263 | 4.624 | ------ | 1.576 | 6.2 | 1930 |
| 1931 | 1.333 | 2.00 | 3.333 | 1.097 | 4.430 | ------ | 1.270 | 5.7 | 1931 |
| 1932 | .930 | 2.00 | 2.930 | 1.060 | 3.990 | ------ | 1.110 | 5.1 | 1932 |
| 1933 | 1.220 | 2.00 | 3.220 | 1.096 | 4.316 | ------ | 1.084 | 5.4 | 1933 |
| 1934 | 1.499 | 1.52 | 3.019 | 1.104 | 4.123 | .302 | 1.075 | 5.5 | 1934 |
| 1935 | 2.331 | .90 | 3.231 | 1.085 | 4.316 | .535 | .849 | 5.7 | 1935 |
| 1936 | 2.694 | .90 | 3.594 | 1.097 | 4.691 | ------ | .909 | 5.6 | 1936 |
| 1937 | 2.543 | .90 | 3.443 | 1.108 | 4.551 | .178 | .871 | 5.6 | 1937 |
| 1938 | 2.036 | .90 | 2.936 | 1.010 | 3.946 | .535 | .819 | 5.3 | 1938 |
| 1939 | 1.905 | 1.077 | 2.982 | 1.055 | 4.037 | .535 | .858 | 5.43 | 1939 |
| 1940 | 1.886 | .90 | 2.786 | 1.016 | 3.802 | .535 | .863 | 5.20 | 1940 |
| 1941 | 2.478 | .90 | 3.378 | 1.009 | 4.387 | .535 | .788 | 5.71 | 1941 |

† Tax of .535c per lb. on refined sugar instituted June 8, 1934; eliminated January 6, 1936 by U. S. Supreme Court decision; reestablished by Act of Congress September 1, 1937.

* Lamborn Sugar Market Report Aug. 11, 1942.

# Program of Government Aid in Supplying Farm Labor Set Up by Manpower Commission

(*Official Release*)

New measures to help avert shortages of farm labor in critical producing areas were announced recently by the War Manpower Commission through Chairman Paul V. McNutt, and Secretary Claude R. Wickard, agricultural member of the Commission. They outlined Governmental actions to help transport domestic labor into such areas, and also set forth the relationship between the program for expediting movement of domestic labor and the arrangement announced today by the Governments of Mexico and the United States for making available Mexican farm workers if workers cannot be obtained from within the United States.

Chairman McNutt and Secretary Wickard pointed out that a major operating principle of the programs for Government help in recruiting and transporting farm labor is that adequate working standards and protections must be given the workers. Minimum working conditions for farm labor thus are established whenever Government aid is invoked to recruit or transport such workers. Not until it is clear that such minimum working standards and protections have been established, and that no domestic workers are available for jobs at such standards will workers be brought in from Mexico. The workers from Mexico will be afforded standards and protection equivalent to those afforded domestic workers.

A statement on the new program by Chairman McNutt and Secretary Wickard follows:

"Our food production program in the United States is becoming more vital to the war every week. Production is increasing to record heights. At the same time war needs are mounting. Today, with the enemy still on the offensive and with our military and production program steadily expanding, the food needs of ourselves and our Allies are such that mere record production is not enough. We must produce food as this Nation has never produced before.

"The Food for Freedom program calls not only for increasing output of the farm products needed for the war effort wherever possible but also for maintaining full production of war crops once it has been achieved. A major problem on the farms that have normally supplied the larger part of our food for domestic and foreign markets is the problem of available labor. Farm labor shortages have been reported in some areas this year. We will probably experience more extensive and severe shortages in 1943.

"The War Manpower Commission has given the Department of Agriculture the responsibility for helping avert shortages of farm labor by housing and transporting seasonal farm workers needed to grow essential wartime farm products.

"Because of the present emergency, a half million dollars has been allocated to the Department of Agriculture from the President's emergency funds, for a farm labor program. The program will be managed by the Farm Security Administration in cooperation with State and county USDA War Boards and the U. S. Employment Service. For the longer pull, the program must be implemented with additional legislative authority and more funds. Consideration is now being given to this matter and it is expected that a request for such additional funds and authority as are found to be needed will be made to the Congress.

"The plan will operate as follows to provide seasonal farm labor:

"To begin with, of course, farmers will hire whatever workers can be found in their neighborhoods. If farmers cannot themselves find labor, they will seek the help of the nearest U. S. Employment Service office. That office will try to find workers who live nearby. If it is necessary for the U. S. Employment Service to recruit from a distance, the Farm Security Administration will be called upon to help transport workers. The farmers who want the workers will pay for transportation up to 200 miles, and FSA will pay for additional mileage.

"In all cases farmers must meet certain standards of wages and living conditions in order to qualify for transportation help from the FSA in obtaining domestic workers. They must pay the newcomers the going wage in the community for the kind of work performed, with a minimum of 30 cents an hour or its equivalent on a piece work basis. They must give the workers employment for at least three-quarters of the time they are in the area, not counting Sundays. Also they must provide satisfactory housing.

"The Department of Agriculture is also inaugurating an intensive educational campaign for the efficient use of labor in war food production in all areas. This may mean reorganization of farm operations in some cases, possible changes in types of crops, and the pooling of labor needs in order that the demand can be met in an organized and efficient manner and with a minimum of transportation strain and lost man-hours.

"To the extent that the domestic farm labor supply cannot adequately satisfy the farm labor requirements in given areas, the Government has considered making accessible sufficient farm labor from outside the country to carry through the shortage season. In order to be prepared to meet such a situation, the Mexican Government was approached regarding terms on which Mexico would allow farm workers to come into the United States if and when the domestic supply of farm workers becomes inadequate in certain areas. In an arrangement announced tonight by the two Governments, certain terms were stipulated under which Mexican workers may be brought into the United States. In general, these terms set up the following conditions:

1. Mexican workers will not be used to displace domestic workers and will serve only to meet additional needs for which sufficient domestic labor is not available.
2. Payment of transportation expense from the point of origin of worker to employment centers in the United States and return shall be provided.
3. Employment shall be provided for at least three-fourths of the working days in the contract period.
4. Payment shall be on the basis of prevailing wages in the area for comparable work, with a minimum wage of 30 cents an hour, or an equivalent piece work rate, and subject to provisions of existing applicable laws.
5. Adequate and sanitary housing conditions will be available for such labor.

"To implement the arrangement, the services of a number of agencies of the United States Government will be required. Responsibilities will be shared among the Immigration Service of the Department of

Justice, the United States Public Health Service and the United States Employment Service of the Federal Security Agency, and the Farm Security Administration of the Department of Agriculture. The necessary arrangements are now being made by the various agencies involved. United States farmers in the areas in which Mexican labor is to be employed to make up for shortages of domestic labor will place their orders with the U. S. Employment Service. Final arrangements on transportation will be made with the Farm Security Administration.

"Contracts will be entered into with Mexican workers only when it is no longer practicable to meet the need with domestic farm labor. It is expected that Mexican workers will be used in those crops and locations where such labor is customarily employed, such as the cotton areas of the Southwest and the sugar beet areas of the West. It is also a part of the understanding with the Mexican Government that Mexican labor will not be used in the United States in a manner that would lower existing wage or labor standards.

"This Nation is faced with a farm labor situation that requires an organized approach in a field where such organization heretofore has seldom existed. War food production depends directly on our ability to introduce an effective and rational system for the full use of our available supply of farm workers. As far as it can possibly be done, the Manpower Commission intends to meet the wartime labor needs of agriculture by providing domestic workers. Where that cannot be done, the war effort of the United Nations will be speeded by assistance from the nationals of our cooperative Ally to the South. In return for this vital assistance the Government of the United States is glad to cooperate with the Government of Mexico in affording fair returns and full protection to the Mexican workers who join the battle on the food production front.

"The possible availability of some workers from Mexico, however, is in no sense a solution to our own farm labor situation but must be considered simply as a protective source of supply for emergency production needs. It is not a substitute for a definite and effective program to enable every farm worker, whether on his own farm or as a laborer on another farm, to work full time in the Nation's war food production line. It is toward this major problem of full use of our farm manpower that the responsible agencies of Government are now directing their greatest concern and their primary efforts."

# Some Sugar Statistics For 1941

The Department of Agriculture recently issued its statistical statement covering the calendar year 1941, consolidating reports obtained from cane sugar refiners, beet sugar processors, importers and others. The statement was prepared by the Sugar Agency of the Agricultural Conservation and Adjustment Administration.

Total deliveries of sugar during 1941 amounted to 8,098,291 short tons, raw value, compared with 6,890,667 tons in 1940; 6,867,518 tons in 1939; 6,643,253 tons in 1938; and 6,671,402 tons in 1937.

Total deliveries of sugar by the four types of distributors during 1941 as compared with the previous four years were as follows:

| | 1941 | 1940 | 1939 | 1938 | 1937 |
|---|---|---|---|---|---|
| | (short tons, raw value) | | | | |
| Cane sugar refiners' deliveries of refined sugar | 5,523,836 | 4,718,846 | 4,468,679 | 4,594,891 | 4,714,835 |
| Less exports | 47,461* | 178,264 | 132,061 | 65,474 | 74,199 |
| Deliveries for continental consumption | 5,476,375 | 4,540,582 | 4,336,618 | 4,529,417 | 4,640,636 |
| Cane sugar refiners' deliveries of raw sugar | 8,573 | 7,779 | 6,176 | 10,480 | 13,946 |
| Cane sugar refiners' deliveries for continental consumption | 5,484,948 | 4,548,361 | 4,342,794 | 4,539,897 | 4,654,582 |
| Beet sugar processors | 1,952,851 | 1,551,517 | 1,810,456 | 1,448,865 | 1,245,498 |
| Importers of direct-consumption sugar | 564,044 | 693,917 | 572,807 | 562,652 | 615,432 |
| Continental cane mills (direct-consumption sugar) | 96,478 | 96,872 | 141,461 | 91,839 | 155,890 |
| Total | 8,098,321 | 6,890,667 | 6,867,518 | 6,643,253 | 6,671,402 |

* January-September. Data for balance of year not available.

In the above table, the deliveries of refined sugar have been converted to short tons, raw value, by applying the factor 1.07, except in the case of cane sugar refiners. Deliveries of refined sugar by refiners are converted to raw value by using the factor 1.063030 for 1941, 1.061725 for 1940, 1.060259 for 1939, 1.059 for 1938, and 1.0571 for 1937. These factors represents the relationship between meltings of raw sugar and production of refined sugar during the two-year periods 1939-40, 1938-39, 1937-38, 1936-37 and 1935-36, respectively.

*NOTE: The publication of monthly statistical statements has been discontinued.*

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

**LAMBORN & COMPANY, INC.**
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

**LE BOURGEOIS BROKERAGE CO.**
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

Phones RAymond 9035-9036 Established 1871
**HARRY L. LAWS & CO., INC.**
Brokers and Distributors
SUGAR and MOLASSES
**SUGAR FUTURES**
American Bank Building New Orleans, La.

**GAY, SULLIVAN & CO., INC.**
**SUGAR**
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

**STAUFFER, ESHLEMAN & CO., LTD.**
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
**CYANAMID**
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

**INDUSTRIAL LUBRICANTS**

BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
**STANDARD OIL CO. OF LA.**

FOR SUGAR CANE FINANCING
**STATE AGRICULTURAL CREDIT CORPORATION, INC.**
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

**AMERICAN MOLASSES CO.**
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LEGARDEUR LLOYD R. MARKS
**R. J. LEGARDEUR & COMPANY**
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

**PENICK & FORD, LTD., INCORPORATED**
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

**STANDARD SUPPLY AND HARDWARE CO., INC.**
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

**E. A. RAINOLD, INC.**
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS

# THE SUGAR BULLETIN

Entered as second-class matter April 13, 1925, at the post office at New Orleans, La., under Act of March 6, 1879.


Chemistry Library,
Louisiana State University,
University, La.

We stand for the encouragement of Home Industries as against foreign Competition

Vol. 20 NEW ORLEANS, LA., SEPTEMBER 15, 1942 No. 24

Announcing The

## TWENTIETH ANNUAL MEETING

of the

## AMERICAN SUGAR CANE LEAGUE

of the

## U. S. A., Inc.

**Thursday, September 24th, 1942**

Jackson Room, Mezzanine Floor, St. Charles Hotel
New Orleans, La.
Meeting Convenes at 1:30 P. M.

At this meeting there will be an election of Officers and Members of the Executive Committee to serve during the ensuing year.

**All Members of the League Will Please Consider This as an Official Notice To Attend**

THE SUGAR BULLETIN

414 Whitney Bldg., New Orleans

Marcel J. Voorhies, Editor
Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
Subscription Price, 50 Cents per Year.

OFFICERS OF THE AMERICAN SUGAR CANE LEAGUE
President, W. C. Kemper, Franklin, La.
1st Vice President, John J. Shaffer, Jr., Houma, La.
2nd Vice President, George L. Billeaud, Broussard, La.
3rd Vice President, Dubourg Thibaut, Donaldsonville, La.
4th Vice President, C. J. Bourg, Washington, D. C.
Treasurer, Frank L. Barker, Lockport, La.
General Manager, Marcel J. Voorhies, New Orleans, La.
Secretary, Reginald Dykers, New Orleans, La.

EXECUTIVE COMMITTEE
W. F. Giles, Adeline, La.
Edward J. Gay, Plaquemines, La.
R. H. Chadwick, Bayou Goula, La.
Walter Godchaux, Jr., Reserve, La.
Stephen C. Munson, Jeanerette, La.
Louis Wilbert, Plaquemine, La.
Warren Harang, Lockport, La.
H. Langdon Laws, Cinclare, La.
C. F. Dahlberg, New Orleans, La.
Chas. A. Farwell, New Orleans, La.
Charles O'Brien, Bunkie, La.
James A. Lanier, Napoleonville, La.
Leon J. Landry, New Iberia, La.
David W. Pipes, Jr., Houma, La.
W. Prescott Foster, Franklin, La.
J. P. Duhe, Jeanerette, La.
E. N. Kearny, New Orleans, La.
Geo. M. Murrell, Bayou Goula, La.
Louis Robichaux, New Orleans, La.
L. A. Borne, Raceland, La.

# Testing Varieties of Sugarcane For Resistance to Inversion of Sucrose and for Windrowing Qualities In Louisiana

*(By John I. Lauritzen, Senior Physiologist, Division of Sugar Plant Investigations, Bureau of Plant Industry, U. S. Department of Agriculture)*

### Introduction

Before the widespread introduction of the P.O.J. varieties into Louisiana (1924-1926), the sugarcane grower had varieties that would windrow satisfactorily. Both D. 74 and Louisiana Purple are resistant to inversion of sucrose. D. 74 also possesses a straight stalk, making it more suitable for windrowing. With the introduction of the P.O.J. varieties that show greater and varying degrees of susceptibility to inversion of sucrose, the problem of obtaining windrowing canes became acute. In fact, until it was discovered that Co. 281 would windrow successfully there was no variety that possessed satisfactory windrowing qualities. Aside from its use as a windrowing cane, Co. 281 has played an important role as a commercial cane in Louisiana. With the introduction of higher yielding canes and those better adapted to certain soil types and to different regions within the Sugar Belt, the importance of Co. 281 was reduced chiefly to that of a windrowing cane. Furthermore, its susceptibility to mosaic (11)[1] has further impaired its usefulness, because of the effect of this disease on cane and sucrose yields. In view of these limitations of Co. 281, and the fact that early commercial varietal selections from seedlings produced at Canal Point, Fla., were highly susceptible to inversion of sucrose, the discovery of a suitable windrowing variety continued, and still does, as a problem of major importance. The early efforts in this direction were limited by the number of varieties and the amount of cane available for the purpose of testing. As the general program of varietal testing developed, more varieties and a greater amount of cane became available more promptly until currently, preliminary information regarding resistance to inversion of sucrose is obtainable as early as from 4 to 5 years after the varieties are produced. Some of the results already have been published (4, 9). However, in recent years (1933 to 1941) a great mass of data have been accumulated. This paper simplifies and summarizes these data in two tables, discusses the technique employed in testing the factors involved in evaluating varietal resistance to inversion of sucrose, and presents an analysis of the data and certain conclusions.

The publication of this paper has a twofold purpose: 1, to acquaint the sugarcane planter with the progress that has been made towards discovering windrowing canes, and 2, to assist the investigator in the breeding program and in the commercial evaluation of unreleased varieties.

### Object of Testing

The object of sugarcane varietal testing for resistance to inversion of sucrose is threefold: 1, of primary and the most pressing importance is the discovery of satisfactory windrowing canes, an essential characteristic of which is high resistance to inversion of sucrose; 2, discovery of varieties resistant to inversion of sucrose that would satisfy commercial requirements other than windrowing and would also greatly reduce the loss of sucrose (often unobserved) which now normally occurs in the interval between cutting and milling; and 3, a knowledge of the resistance or susceptibility of all commercial varieties to loss of sucrose through inversion would enable the grower and the mill operator to govern harvesting, transporting, and milling operations so as to minimize such loss, especially in the case of very susceptible varieties. This can be done by milling the cane promptly after cutting or by keeping the cane wet during the interval between cutting and milling (6).

### Method of Testing

The early work on testing varieties for their windrowing qualities was done by analyzing cane windrowed for that purpose. It was soon found that this procedure had very definite limitations: 1, the size of planting and the size and number of samples required for satisfactory results limited the number of varieties that could be tested; 2, in seasons when the soil was wet and there was sufficient rainfall to maintain a high-water content, it was not possible to differentiate varietal resistance to inversion of sucrose in varieties that showed considerable difference under less favorable conditions;[2] and 3, often the time required for conducting a particular test was too long (usually an entire season). It was found that testing for resistance to inversion of sucrose could be more effectively done on less cane and in a shorter time, with more replications, by storing mill cane under dry conditions in an open shed. It was also found (4, 6, 8, 9, 10) that the results followed closely those obtained when the weather was sufficiently dry to bring about loss of moisture and inversion of sucrose in the windrow. When high resistance to inversion of sucrose has been established in varieties that possess the essential straightness of stalk and sucrose content, those varieties should be further tested in the windrow for evidence of inversion and other conditions of deterioration.

### Factors Affecting Inversion of Sucrose

The factors affecting the inversion of sucrose in mill and windrowed cane, and the evaluation of varietal susceptibility to this change, may be conveniently divided into the two groups—external or environmental factors and internal or factors inherent in the sugarcane plant. The external or environmental factors affecting inversion of sucrose are: temperature, moisture content of air and soil, air movement such as caused by wind and convection currents, and the degree of exposure to the evaporating power of the air as affected by size of the samples and position with respect to other samples and evaporating surfaces.

Some of the possible and known internal factors affecting inversion of sucrose are: 1, the presence in the sugarcane stalk of invertase, an active agent in inversion; 2, concentration of invertase, sucrose, and invert sugars in the cells in which inversion occurs; 3, a varietal factor apparently acting independently or in spite of the concentration of invertase, sucrose, and invert sugars; 4, water content of the stalk; 5, physical conditions, including texture, waxy covering, and size of stalk, because of their effect on loss of moisture from the cane; and 6, maturity of the cane.

### Controllability of Factors Affecting Inversion of Sucrose

It would be possible to standardize the external factors and to maintain them uniformly from experiment to experiment and from season to season. However, it has been felt that the cost of providing sufficient space to properly accommodate several hundred samples at uniform exposure at a constant temperature, humidity, and air movement would be prohibitive.

Because sufficient space under controlled conditions of temperature, humidity, and air movement was not available to accommodate the necessary samples of varieties requiring testing each season, a modified control was adopted. Under Louisiana conditions, temperature, except as it affects moisture conditions and loss of moisture from cane generally, has only a minor effect on inversion of sucrose in cane uninjured by freezing temperatures. The chief virtue of temperature control is that it makes the control of humidity possible. No attempt, except that provided by shading, has been made to control temperature in varietal testing experiments. Because the change in water content of a sugarcane stalk is the most potent factor influencing inversion of sucrose and because loss of moisture is the most effective controllable change hastening inversion, uniform samples of cane were stored under as dry conditions as were available at the time the experiments were conducted. Such dry conditions are provided by means of an open shed, and to further insure considerable loss of moisture the samples of cane were placed so as to furnish the greatest possible exposure to the evaporating power of the air. Such storage caused considerable loss of moisture and generally resulted in some inversion in all varieties,[3] and considerable inversion in susceptible varieties. Storage in an open shed provides an effective means of differentiating varietal susceptibility in a given experiment but, because of the difference in the drying power of the air in different experiments, the amount of inversion of sucrose is not directly comparable between experiments. The usual weather conditions that prevail during the harvesting season provide for the high evaporating capacity of air during the early part of the season; this capacity normally declining with the advance of the season. Thus nature has been kind to the Louisiana sugarcane planter in reducing the hazard for inversion of sucrose during the period (usually from November 15 to 20 and throughout the remainder of the harvesting season) in which he windrows his cane.

The only internal factor that is subject to any effective degree of control during the tests is the water content of the cane. By maintaining a high moisture content, it is possible to hold the rate of inversion in all varieties at a minimum during the period of testing, and with a greater degree of success in highly resistant varieties. By reducing the water content sufficiently rapidly, it is possible to increase the rate of inversion in nearly all varieties and with greater facility in susceptible varieties. Under field conditions, i.e., in the heap row, at the derricks, and in the windrow, the water content, and hence inversion of sucrose, is less subject to control. Some precautions that will be of value in preserving the sucrose content of the cane can be observed. When practical, it is advisable to windrow when the cane is cool and the ground wet. It might be possible under favorable conditions artificially to wet the soil before windrowing. Any precaution that can be observed to minimize the loss of moisture will aid in reducing the loss of sucrose through inversion.

Inherent factors such as concentration of invertase, sucrose, and invert sugars may be directly modified by the loss of moisture during storage. Such changes in concentration do not appear significantly to affect varietal differentiation relative to resistance to inversion of sucrose. An increase in sucrose concentration in a given variety during the harvesting period (October to January), because it is a sign of greater maturity, generally indicates an increase in resistance to inversion of sucrose (8). Between varieties there is no correlation between the total concentration of sucrose and invertase in the sugarcane stalk and resistance to inversion of sucrose (8). There is not enough known about local concentrations within the tissues of the stalk to form a basis of generalization.

The texture and size of stalk, waxy covering, and maturity of the stalks are varietal characteristics, and are influenced to varying degrees by the conditions under which the cane is grown. Maturity of the cane each season enters actively as a factor in testing. In general, as the cane matures with the advance of the season there is an increase in resistance to inversion of sucrose. Taking into consideration this fact, along with the facts that with the advance of the season the evaporating power of the air tends to decline and inversion tends to be less when the loss of moisture is less, it will be seen that the later part of the harvesting season is less favorable for differentiating the degrees of resistance between varieties than the earlier part. Here again, nature has been kind to the Louisiana planter, for when the time comes for him to windrow, the cane is generally more resistant to inversion of sucrose than earlier in the season.

Although there are indications (2) of a variation in the rate of maturity in different varieties during the harvesting season, the variation is rarely of sufficient importance to obscure the difference in degree of resistance to inversion of sucrose between varieties, except possibly in those cases where the degree of resistance is similar.

### Testing in Relation to Agronomic and Pathological Programs

The problem of testing varieties for their resistance to inversion of sucrose and windrowing characteristics in Louisiana is intimately associated with pathological (1) and agronomic (3) testing of varieties, and its extent and completeness is conditioned by the scope and progress of pathological and agronomic experiments and the nature of the results obtained. Because of the quantity of cane required for adequate testing for resistance to inversion, it is not practical to test all varieties subjected to experimentation by

the pathologists, not even all varieties that are given C.P. numbers. For the most part, the procedure followed is to test all varieties selected by the pathologists that show commercial possibilities when tested by the agronomists. In the early stages of testing, the size and number of samples are limited by the amount of cane that the agronomists can spare for the purpose.

### Sampling

Four 10-stalk samples (2 control samples and 2 stored) especially selected for uniformity were the smallest size and number of samples used. Usually more and larger samples were used. Varieties that show considerable resistance to inversion of sucrose and also indicate commercial possibilities are further tested on a larger and more extensive scale. Varieties that show high susceptibility in comparison with the control varietes (Co. 281 and Co. 290) are not, as a rule, subjected to further testing unless they have other commercial possibilities. As soon as sufficient seed cane is available the varieties selected for further testing are planted on a scale to provide at least fifteen 20-stalk samples as plant cane for more comprehensive experiments.

### Experimental Data

Aside from the P.O.J.[4] and parent varieties (exclusive of Co. 281), 260 unreleased and 9 commercial varieties have been tested (table 1); 31 of these were of the 1929 series, 21 of the 1931 series, 45 of the 1932 series, 91 of the 1933 series, 47 of the 1934 series, 2 of the 1935 series, 22 of the 1936 series, 2 of the 1937 series, 3 miscellaneous varieties, and 5 commercial varieties exclusive of those in the various series mentioned above. The tests extended over a period of years (1933 to 1941), and were conducted at the U. S. Sugar Plant Field Station, Houma, Louisiana.

The data in tables 1 and 2 were derived from the results obtained from three windrowing experiments and from 66 experiments conducted during a period of 8 years, in which comparable samples of cane of different varieties were stored in the shade in an open shed. The 66 experiments included all the dry storage experiments dealing directly with varietal testing for resistance to inversion of sucrose.

Some of the generalizations made in this paper are based, in part, on results of many other experiments conducted during this same period on the effects of temperature, moisture, maturity, and other factors on inversion of sucrose in mill and windrowed cane.

The varietal rating is based on the drop in purity during a period of storage of about 2 weeks (3 to 7 weeks in windrowing experiments). The ratings for each experiment were determined separately and were obtained by assigning the value of 1 to the drop in purity of Co. 281 and dividing the drop in purity of each of the other varieties by the drop in purity of Co. 281 to determine the ratings of the other varieties. Whenever a given variety was included in more than one experiment, the average rating was the average of the ratings from all the experiments in which it was included. The extremes were the highest and lowest ratings of a given variety obtained in all the experiments in which it was included.

The ratings are not to be regarded as representing absolute values. They may be expected to vary somewhat from experiment to experiment, depending upon variation in the composition of samples, particularly of the control variety (Co. 281), and the peculiar behavior in some instances of a variety in which the resistance exhibited is higher than normal. If in a given experiment the drop in purity of the control variety is greater or less than normal, this fact is reflected in the ratings of all the other varieties. In case of such variations in varieties other than that of the control variety, it is only the ratings of these varieties that are affected.

The values of ratings may be expected to vary somewhat with the degree of maturity, and the rate of maturity may also vary to some degree depending upon the variety (2).

Because of the loss hazard through inversion of sucrose under dry conditions in the windrow, it is felt that no variety should be recommended as a windrowing cane unless it has an average rating of 1 or better. This rating should also be based on small differences in ratings between experiments. The loss of sucrose in windrowed cane of the variety Co. 281 under dry conditions is sometimes higher than desirable, especially if the cane is relatively immature. If favorable weather could be predicted or the condition of moisture in the windrow controlled, varieties of less resistance could be windrowed with satisfactory results (6). In cases of extreme emergency, varieties with slightly less resistance than that of Co. 281 can be windrowed (10). Table 2 shows one list of varieties that have given results as good as or slightly better than Co. 281, and a second list of varieties that have a rating under 1.5. Some of these varieties have been tested in only one experiment. These varieties will be further tested in all cases where the results obtained by the agronomists and pathologists justify such a procedure. There is a possibility that some of the varieties in list 1 may be shifted to list 2, and vice versa, or even dropped lower in the scale of resistance. Varieties showing a lower rating than those listed in table 2 generally are not regarded as favorable material for windrowing, although in certain instances they may prove to be so.

The consistency of the results in connection with varieties C.P. 29/94, C.P. 29/99, C.P. 29/131, C.P. 29/137, C.P. 32/134, C.P. 32/202, C.P. 32/206, and C.P. 33/121 shows that in the windrow a behavior as good as or better than Co. 281 may be expected. C.P. 32/206 is the only variety of this group, besides Co. 281, that is regarded as a possible commercial variety of cane. The average behavior of C.P. 32/337 and C.P. 33/232 has been better than that of Co. 281, but the variation between experiments has been rather large; therefore, further testing of these two varieties is desired. Varieties C.P. 29/94 and C.P. 29/99 are regarded as quite superior to Co. 281 in their resistance to inversion of sucrose.

Among the varieties represented in table 2 that have been included in only one or two tests, it may be expected that some of them may prove to be good windrowing canes. It is believed that the results given (table 2) indicate that the prospects for obtaining good windrowing varieties are good. It may be further stated that there are now in the hands of the pathologists and agronomists a large number of new varieties from the parents P.O.J. 2725 X C.P. 1165, progenies of which had previously yielded the commercial varieties C.P. 29/103, 116, and 120 and a fair number of varieties (C.P. 29/94, 99, 131, and 137) that had shown resistance to inversion of sucrose as great as or greater than Co. 281. From this large group of new varieties, those showing promise for commercial culture, as indicated by results of pathological and agronomic tests, will be tested at the earliest possible date for their resistance to inversion and other windrowing qualities.

The results shown in tables 1 and 2 indicate that certain parent crosses tend to yield more windrowing canes than others. For example, the crosses P.O.J. 2725 X C.P. 1165 and P.O.J. 2725 X C.P. 1161 have yielded a fair number of windrowing or near windrowing canes. Because of the high resist-

**TABLE 1.—Ratings relative to inversion of sucrose in sugarcane varieties grown commercially in Louisiana and in unreleased varieties that have indicated commercial possibilities.**

(Ratings are based on differences in drop in purity during about 2 weeks' storage under dry conditions.* Co. 281 was the control variety and the drop in purity of this variety in each experiment was given the value of 1.0. The ratings of the other varieties were obtained by dividing the drop in purity of these varieties by that of Co. 281. Varieties with a rating less than 1.0, such as 0.2 for C.P.29/99 and 0.5 for C.P. 29/94, have shown greater resistance to inversion of sucrose than Co. 281, while varieties with a rating greater than 1.0, such as 4.6 for C. P. 29/1 and 2.4 for Co. 290, have shown greater susceptibility to inversion of sucrose than Co. 281.)

**Unreleased and Commercial Varieties of Sugarcane**

| Variety tested | Parents | Number of experiments conducted | Rating | |
|---|---|---|---|---|
| | | | Average | Extremes** |
| Co. 281 (Control) | P.O.J. 213 X Co. 206 | | 1.0 | |
| C. P. 291/1 | D.74 X C.P. 27/108 | 2 | 4.6 | 3.3—5.9 |
| 15 | D.74 X U.S. 1694 | 1 | 2.5 | 2.5 |
| 58 | P.O.J. 2878 Selfed | 1 | 1.9 | 1.9 |
| 89 | P.O.J. 2725 X C.P. 1165 | 6 | 1.7 | 0.9—3.3 |
| 93 | do | 1 | 2.1 | 2.1 |
| 94 | do | 8 | 0.5 | +0.3—1.1 |
| 98 | do | 3 | 5.6 | 2.2—10.7 |
| 99 | do | 10 | 0.2 | +0.5—1.0 |
| 101 | do | 1 | 2.4 | 2.4 |
| 103® | do | 4 | 8.3 | 0.7—27.6 |
| 108 | do | 2 | 3.6 | 3.4—3.8 |
| 111 | do | 1 | 7.6 | 7.6 |
| 114 | do | 3 | 1.5 | 1.0—2.5 |
| 115 | do | 1 | 5.6 | 5.6 |
| 116® | do | 8 | 2.7 | 1.4—8.8 |
| 117 | do | 5 | 1.6 | 1.1—2.5 |
| 120® | do | 10 | 2.4 | 1.0—6.6 |
| 121 | do | 1 | 3.3 | 3.3 |
| 125 | do | 2 | 1.9 | 1.8—1.9 |
| 127 | do | 4 | 1.7 | 1.1—2.1 |
| 130 | do | 2 | 2.5 | 2.1—2.8 |
| 131 | do | 4 | 0.8 | +0.5—1.7 |
| 136 | do | 4 | 8.2 | 6.4—9.5 |
| 137 | do | 9 | 0.8 | +0.1—1.6 |
| 142 | do | 2 | 14.4 | 6.1—22.7 |
| 282 | Co. 281 X U.S. 1694 | 2 | 3.3 | 3.1—3.4 |
| 283 | do | 5 | 3.8 | 1.3—8.9 |
| 285 | do | 1 | 5.1 | 5.1 |
| 291 | do | 2 | 4.4 | 3.7—5.1 |
| 301 | Co. 281 X P.O.J. 2878 | 7 | 2.7 | 1.3—5.3 |
| 320® | Co. 281 X C.P. 27/34 | 4 | 6.9 | 2.8—11.7 |
| C. P. 31/12 | C.P. 29/310 X C.P. 28/74 | 1 | 3.6 | 3.6 |
| 73 | C.P. 29/84 X 21 N.G. 37 | 2 | 10.1 | 3.0—17.2 |
| 89 | Co. 281 X P.O.J. 2878 | 2 | 6.0 | 2.0—10.0 |
| 110 | do | 2 | 13.1 | 4.0—22.1 |
| 114 | do | 2 | 10.8 | 2.2—19.4 |
| 124 | do | 1 | 2.6 | 2.6 |
| 152 | Co. 281 X 28 N.G. 251 | 1 | 3.0 | 3.0 |
| 160 | do | 2 | 4.5 | 1.8—7.1 |
| 161 | do | 1 | 2.5 | 2.5 |
| 234 | Co. 281 X U.S. 1694 | 2 | 8.1 | 2.0—14.1 |
| 258 | do | 2 | 9.7 | 2.8—16.6 |
| 274 | do | 1 | 2.1 | 2.1 |
| 276 | do | 1 | 6.5 | 6.5 |
| 288 | do | 1 | 5.2 | 5.2 |
| 296 | do | 3 | 1.8 | 0.8—3.6 |
| 299 | do | 1 | 2.8 | 2.8 |
| 302 | do | 2 | 7.4 | 2.3—12.4 |
| 509 | Co. 281 X C.P. 27/1 | 1 | 3.8 | 3.8 |
| 529 | Co. 281 X P.O.J. 2878 | 1 | 4.0 | 4.0 |
| 551 | Co. 281 X U.S. 1694 | 2 | 6.5 | 1.9—11.1 |
| 561 | do | 1 | 1.4 | 1.4 |
| C. P. 32/2 | P.O.J. 2753 X I. 1081 | 1 | 5.8 | 5.8 |
| 25 | P.O.J. 2725 X U.S. 1694 | 1 | 2.0 | 2.0 |
| 28 | do | 1 | 4.2 | 4.2 |
| 62 | U.S. 1643 X C.P. 28/100 | 1 | 6.4 | 6.4 |
| 75 | do | 1 | 7.8 | 7.8 |
| 87 | do | 1 | 5.7 | 5.7 |
| 91 | Co. 281 X 28 N.G. 251 | 1 | 5.7 | 5.7 |
| 97 | do | 3 | 1.8 | 1.3—2.5 |
| 115 | P.O.J. 2725 X C.P. 1161 | 1 | 3.1 | 3.1 |
| 117 | do | 1 | 2.2 | 2.2 |
| 118 | do | 2 | 3.1 | 2.5—3.7 |
| 120 | do | 1 | 2.3 | 2.3 |
| 123 | do | 1 | 2.2 | 2.2 |
| 124 | do | 2 | 2.1 | 2.0—2.1 |
| 131 | do | 1 | 3.4 | 3.4 |
| 133 | do | 1 | 1.4 | 1.4 |
| 134 | do | 5 | 1.0 | 0.5—1.7 |
| 135 | do | 1 | 1.4 | 1.4 |
| 138 | do | 1 | 2.5 | 2.5 |
| 146 | do | 3 | 4.5 | 2.3—8.1 |
| 168 | Co. 281 X U.S. 1694 | 1 | 2.2 | 2.2 |
| 170 | D.74 X U.S. 1694 | 1 | 3.6 | 3.6 |
| 179 | C.P. 28/9 X 28 N.G. 288 | 1 | 3.2 | 3.2 |
| 182 | C.P. 29/290 Selfed | 1 | 1.7 | 1.7 |
| 195 | C.P. 28/44 Selfed | 1 | 1.5 | 1.5 |
| 196 | do | 1 | 2.5 | 2.5 |
| 202 | Co. 281 X C.P. 30/23 | 4 | 0.9 | 0.6—1.0 |
| 206 | do | 5 | 1.0 | 0.6—1.9 |
| 207 | do | 1 | 2.4 | 2.4 |
| 209 | do | 1 | 2.0 | 2.0 |
| 212 | do | 1 | 2.0 | 2.0 |
| 214 | do | 1 | 2.1 | 2.1 |
| 233 | C.P. 807 X C.P. 28/36 | 1 | 3.2 | 3.2 |
| 307 | Co. 281 X C.P. 30/23 | 1 | 2.0 | 2.0 |
| 324 | P.O.J. 2725 X C.P. 1161 | 3 | 1.4 | 1.1—2.0 |
| 329 | do | 1 | 1.6 | 1.6 |
| 334 | do | 2 | 0.7 | +0.1—1.5 |
| 335 | do | 1 | 1.4 | 1.4 |
| 336 | do | 2 | 1.1 | 0.1—2.1 |
| 337 | do | 4 | 0.9 | +1.0—2.0 |
| 339 | do | 1 | 5.8 | 5.8 |
| 342 | do | 1 | 3.6 | 3.6 |
| 345 | do | 4 | 2.1 | 1.8—2.4 |
| 348 | do | 1 | 3.9 | 3.9 |
| 352 | Co. 281 X U.S. 1694 | 1 | 6.3 | 6.3 |
| C. P. 33/51 | C.P. 31/289 Selfed | 1 | 1.5 | 1.5 |
| 53 | do | 2 | 4.6 | 3.7—5.5 |
| 99 | C.P. 31/117 X C.P. 28/100 | 1 | 3.7 | 3.7 |
| 121 | C.P. 29/307 X C.P. 27/48 | 4 | 1.0 | 0.3—1.4 |
| 125 | do | 1 | 1.3 | 1.3 |
| 142 | C.P. 31/303 X C.P. 27/108 | 1 | 1.6 | 1.6 |
| 148 | C.P. 31/493 X C.P. 31/521 | 1 | 4.7 | 4.7 |
| 165 | C.P. 1165 X C.P. 31/518 | 4 | 4.6 | 2.4—7.7 |
| 173 | C.P. 1165 X C.P. 28/44 | 3 | 3.6 | 1.9—6.4 |
| 174 | do | 1 | 7.5 | 7.5 |
| 185 | do | 1 | 21.5 | 21.5 |
| 216 | C.P. 28/9 X C.P. 31/288 | 2 | 1.9 | 1.6—2.1 |
| 224 | C.P. 27/139 X C.P. 31/432 | 5 | 1.4 | 0.7—2.2 |
| 228 | do | 3 | 1.5 | 1.0—2.0 |
| 229 | do | 1 | 0.9 | 0.9 |
| 232 | do | 3 | 0.7 | +0.1—1.9 |
| 238 | C.P. 31/199 Selfed | 1 | 0.3 | 0.3 |
| 243® | Co. 281 X U.S. 1694 | 4 | 5.6 | 3.7—7.3 |
| 246 | do | 1 | 9.8 | 9.8 |
| 249 | do | 1 | 9.2 | 9.2 |
| 253 | do | 5 | 4.6 | 2.6—9.3 |
| 255 | do | 2 | 11.2 | 8.9—13.5 |
| 257 | do | 3 | 3.9 | 1.2—8.7 |
| 258 | do | 1 | 8.9 | 8.9 |
| 261 | do | 2 | 13.1 | 4.5—21.7 |
| 262 | do | 1 | 9.6 | 9.6 |
| 273 | C.P. 29/142 X C.P. 27/108 | 1 | 1.6 | 1.6 |
| 278 | do | 3 | 5.0 | 3.4—6.4 |
| 285 | do | 1 | 3.9 | 3.9 |
| 297 | C.P. 31/289 Selfed | 1 | 1.6 | 1.6 |
| 298 | do | 1 | 2.7 | 2.7 |
| 299 | do | 1 | 3.4 | 3.4 |
| 301 | do | 1 | 5.2 | 5.2 |
| 302 | do | 1 | 0.7 | 0.7 |
| 307 | C.P. 1165 X C.P. 27/108 | 1 | 3.3 | 3.3 |
| 309 | do | 1 | 2.4 | 2.4 |
| 320 | do | 4 | 3.2 | 0.9—8.2 |
| 323 | do | 1 | 3.8 | 3.8 |
| 334 | C.P. 31/117 X C.P. 28/100 | 1 | 4.8 | 4.8 |
| 335 | do | 1 | 4.1 | 4.1 |
| 337 | do | 1 | 2.9 | 2.9 |
| 342 | C.P. 29/307 X C.P. 27/48 | 1 | 1.1 | 1.1 |
| 351 | C.P. 28/9 X C.P. 28/100 | 1 | 3.9 | 3.9 |
| 364 | C.P. 1165 X C.P. 28/44 | 1 | 7.1 | 7.1 |
| 365 | do | 1 | 2.9 | 2.9 |
| 366 | do | 3 | 5.0 | 4.5—5.6 |
| 370 | do | 1 | 3.7 | 3.7 |
| 372 | do | 3 | 9.5 | 6.9—11.6 |
| 374 | do | 1 | 4.2 | 4.2 |
| 375 | do | 1 | 2.8 | 2.8 |
| 389 | C.P. 28/9 X C.P. 31/288 | 1 | 2.1 | 2.1 |
| 393 | Co. 281 X U.S. 1694 | 1 | 4.0 | 4.0 |
| 394 | do | 1 | 3.3 | 3.3 |
| 397 | do | 1 | 2.4 | 2.4 |
| 398 | do | 1 | 3.5 | 3.5 |
| 400 | do | 1 | 3.8 | 3.8 |
| 401 | Co. 281 X U.S. 1694 | 1 | 3.2 | 3.2 |
| 406 | do | 3 | 3.8 | 2.8—5.5 |
| 409 | do | 5 | 3.2 | 1.2—4.1 |
| 411 | do | 1 | 2.9 | 2.9 |
| 413 | do | 1 | 3.6 | 3.6 |
| 414 | do | 1 | 6.2 | 6.2 |
| 415 | do | 4 | 11.3 | 3.3—28.0 |
| 416 | do | 1 | 2.0 | 2.0 |
| 420 | do | 1 | 4.8 | 4.8 |
| 421 | do | 1 | 1.6 | 1.6 |
| 425 | do | 1 | 3.7 | 3.7 |
| 427 | do | 1 | 4.4 | 4.4 |
| 430 | do | 1 | 2.7 | 2.7 |
| 435 | do | 1 | 4.6 | 4.6 |
| 437 | do | 2 | 2.8 | 2.4—3.2 |
| 438 | do | 1 | 3.4 | 3.4 |
| 441 | do | 1 | 2.2 | 2.2 |
| 445 | do | 1 | 3.8 | 3.8 |
| 446 | do | 1 | 1.7 | 1.7 |
| 449 | do | 2 | 4.8 | 3.9—5.6 |
| 450 | do | 1 | 3.1 | 3.1 |
| 451 | do | 1 | 5.8 | 5.8 |
| 453 | do | 1 | 6.1 | 6.1 |
| 455 | do | 1 | 3.6 | 3.6 |
| 459 | do | 1 | 3.2 | 3.2 |
| 461 | do | 1 | 2.0 | 2.0 |
| 464 | do | 1 | 3.0 | 3.0 |
| 467 | do | 1 | 3.0 | 3.0 |
| 471 | do | 3 | 8.0 | 1.4—19.5 |
| 472 | do | 2 | 4.1 | 3.7—4.4 |
| 476 | do | 1 | 1.8 | 1.8 |
| 485 | C.P. 1165 X C.P. 27/108 | 4 | 2.0 | 1.0—2.9 |
| 494 | C.P. 1165 X C.P. 28/44 | 2 | 2.1 | 1.2—3.0 |
| 500 | Co. 281 X U.S. 1694 | 4 | 11.8 | 2.1—30.0 |
| 509 | do | 1 | 2.2 | 2.2 |
| C. P. 34/1 | Co. 281 X U.S. 1694 | 3 | 4.7 | 3.8—5.5 |
| 9 | P.O.J. 2725 X C.P. 1165 | 2 | 12.8 | 10.1—15.5 |
| 10 | do | 3 | 10.7 | 4.7—14.3 |
| 16 | U.S. 1643 X C.P. 29/284 | 2 | 7.8 | 4.5—11.0 |
| 20 | do | 3 | 3.5 | 2.8—4.6 |
| 21 | do | 3 | 8.2 | 2.4—15.0 |
| 25 | C.P. 28/11 X C.P. 27/38 | 3 | 5.2 | 3.8—7.7 |
| 27 | do | 2 | 10.9 | 4.2—17.2 |

**Unreleased and Commercial Varieties of Sugarcane**

| Variety tested | Parents | Number of experiments conducted | Rating | |
|---|---|---|---|---|
| | | | Average | Extremes** |
| Co. 281 (Control) | P.O.J. 213 X Co. 206 | | 1.0 | |
| 52 | Co. 281 X P.O.J. 2878 | 1 | 0.2 | 0.2 |
| 53 | do | 3 | 8.4 | 6.9—10.4 |
| 54 | Co. 281 X C.P. 1165 | 2 | 1.3 | 0.4—2.1 |
| 57 | do | 1 | 3.2 | 3.2 |
| 59 | do | 4 | 4.9 | 3.6—6.0 |
| 64 | Co. 281 X C.P. 29/290 | 1 | 1.3 | 1.3 |
| 67 | Co. 281 X C.P. 32/197 | 1 | 3.2 | 3.2 |
| 70 | C.P. 28/10 X C.P. 29/290 | 1 | 3.2 | 3.2 |
| 73 | C.P. 29/307 X C.P. 29/252 | 1 | 3.1 | 3.1 |
| 75 | P.33/30 X C.P. 1161 | 3 | 5.0 | 1.5—11.3 |
| 77 | do | 3 | 2.0 | 1.4—2.5 |
| 79 | do | 3 | 1.4 | 0.8—2.4 |
| 80 | do | 3 | 2.4 | 1.5—3.4 |
| 83 | Co. 281 X U.S. 1694 | 2 | 2.1 | 1.8—2.4 |
| 84 | Co. 281 X U.S. 1694 | 3 | 2.6 | 1.6—3.1 |
| 86 | do | 2 | 3.0 | 2.2—3.8 |
| 90 | Co. 281 X P.O.J. 2878 | 1 | 2.5 | 2.5 |
| 92 | Co. 281 X C.P. 1165 | 2 | 3.6 | 3.0—4.1 |
| 95 | do | 2 | 2.9 | 2.2—3.5 |
| 96 | do | 2 | 2.8 | 2.1—3.5 |
| 102 | P.O.J. 2725 X C.P. 1165 | 2 | 2.3 | 2.3—2.3 |
| 105 | C.P. 28/11 X C.P. 27/38 | 2 | 4.0 | 2.8—5.1 |
| 112 | P.O.J. 2725 X C.P. 1161 | 1 | 1.9 | 1.9 |
| 115 | do | 2 | 0.7 | 0.4—1.0 |
| 120 | Co. 281 X P.O.J. 2878 | 2 | 1.8 | 1.2—2.2 |
| 138 | C.P. 28/11 X C.P. 27/38 | 2 | 3.3 | 1.7—4.8 |
| 139 | P.O.J. 2725 X C.P. 1165 | 5 | 1.6 | 0.8—2.6 |
| 141 | P.O.J. 2725 X C.P. 1161 | 2 | 1.8 | 1.7—1.9 |
| 143 | do | 2 | 2.1 | 1.9—2.2 |
| 144 | do | 1 | 2.3 | 2.3 |
| 149 | Co. 281 X U.S. 1694 | 1 | 2.8 | 2.8 |
| 151 | do | 1 | 3.6 | 3.6 |
| 152 | do | 1 | 3.1 | 3.1 |
| 153 | do | 1 | 2.9 | 2.9 |
| 155 | Co. 281 X P.O.J. 2878 | 2 | 2.8 | 1.9—3.7 |
| 156 | Co. 281 X C.P. 1165 | 1 | 2.3 | 2.3 |
| 158 | Co. 281 X P.O.J. 2822 | 1 | 2.7 | 2.7 |
| 164 | P.33/30 X C.P. 1161 | 1 | 1.1 | 1.1 |
| 165 | P.O.J. 2725 X C.P. 1161 | 2 | 1.3 | 1.2—1.4 |
| C. P. 35/1 | Co. 281 X C.P. 27/38 | 2 | 2.9 | 2.3—3.5 |
| 14 | C.P. 31/78 Selfed | 1 | 1.4 | 1.4 |
| C. P. 36/1 | P.O.J. 2725 X C.P. 1165 | 1 | 0.7 | 0.7 |
| 7 | do | 1 | 1.9 | 1.9 |
| 17 | Co. 281 X C.P. 1165 | 1 | 2.8 | 2.8 |
| 18 | do | 1 | 4.7 | 4.7 |
| 19 | do | 1 | 3.2 | 3.2 |
| 22 | do | 1 | 2.9 | 2.9 |
| 23 | do | 2 | 1.4 | 1.1—1.6 |
| 27 | Co. 281 X U.S. 1694 | 1 | 1.3 | 1.3 |
| 50 | do | 1 | 4.4 | 4.4 |
| 54 | do | 1 | 3.8 | 3.8 |
| 56 | P.O.J. 2725 X C.P. 1165 | 1 | 2.1 | 2.1 |
| 63 | do | 1 | 4.7 | 4.7 |
| 66 | do | 1 | 3.5 | 3.5 |
| 69 | do | 1 | 6.5 | 6.5 |
| 72 | do | 1 | 1.6 | 1.6 |
| 78 | do | 1 | 8.7 | 8.7 |
| 80 | do | 1 | 3.0 | 3.0 |
| 81 | do | 1 | 8.2 | 8.2 |
| 89 | do | 1 | 2.4 | 2.4 |
| 94 | do | 1 | 1.3 | 1.3 |
| 96 | do | 2 | 4.8 | 4.4—5.2 |
| 111 | do | 1 | 8.3 | 8.3 |
| C. P. 37/3 | Co. 281 X C.P. 27/108 | 1 | 1.3 | 1.3 |
| 9 | C.P. 33/224 X C.P. 33/152 | 1 | 0.3 | 0.3 |
| C-3 (310)‡ | Co. 281 X U.S. 1694 | 1 | 5.1 | 5.1 |
| P. 33/11 | P.O.J. 2878 X Badila | 1 | 2.2 | 2.2 |
| F. 31/962 | Co. 281 X C.P. 27/108 | 1 | 1.1 | 1.1 |
| **Commercial Varieties of Sugarcane** | | | | |
| Co. 281 | P.O.J. 213 X Co. 206 | 41 | 1.0 | 1.0 |
| Co. 290 | Co. 221 X D.74 or Kansar | 24 | 2.4 | 0.7—8.1 |
| C. P. 807 | U.S. 1643 X (?) | 4 | 7.7 | 2.7—18.2 |
| C. P. 28/11 | Co. 281 X U.S. 1694 | 5 | 7.8 | 2.6—17.4 |
| C. P. 28/19 | do | 11 | 3.3 | 1.4—7.5 |
| C. P. 29/103 | P.O.J. 2725 X C.P. 1165 | 4 | 8.3 | 0.7—27.6 |
| C. P. 29/116 | do | 8 | 2.7 | 1.4—8.8 |
| C. P. 29/120 | do | 10 | 2.4 | 1.0—6.6 |
| C. P. 29/320 | Co. 281 X C.P. 27/34 | 4 | 6.9 | 2.8—11.7 |
| C. P. 33/243 | Co. 281 X U.S. 1694 | 4 | 5.6 | 3.7—7.3 |

‡ C-3 (310 was considered a promising variety to which a C.P. number had not been given. 310 is the Division of Sugar Plant Investigations serial number for this variety. C-3 designates the cut on the U. S. Sugar Plant Field Station at Houma, La., in which the variety was grown as a seedling. The variety was from a cross made at Canal Point, Fla. @ Commercial.

**TABLE 2.—Ratings of unreleased varieties of sugarcane that have shown high resistance to inversion of sucrose**

(Ratings are based on differences in drop in purity during about 2 weeks' storage under dry conditions.* Co. 281 was the control variety and the drop in purity of this variety in each experiment was given the value of 1.0. The ratings of the other varieties were obtained by dividing the drop in purity of these varieties by that of Co. 281. Ratings less than 1.0 (0.2 to 0.9) indicate greater resistance, and ratings greater than 1.0 (1.1 to 1.4) indicate less resistance to inversion of sucrose than Co. 281.)

**Varieties With Ratings as Good as or Better than Co. 281**

| Variety tested | Parents | Number of experiments conducted | Rating | |
|---|---|---|---|---|
| | | | Average | Extremes** |
| Co. 281 (Control) | P.O.J. 213 X Co. 206 | | 1.0 | |
| C. P. 29/94 | P.O.J. 2725 X C.P. 1165 | 8 | 0.5 | +0.3—1.1 |
| C. P. 29/99 | do | 10 | 0.2 | +0.5—1.0 |
| C. P. 29/131 | do | 4 | 0.8 | +0.5—1.7 |
| C. P. 29/137 | do | 9 | 0.8 | +0.1—1.6 |
| C. P. 36/1 | do | 1 | 0.7 | 0.7 |
| C. P. 32/134 | P.O.J. 2725 X C.P. 1161 | 5 | 1.0 | 0.5—1.7 |
| C. P. 32/334 | do | 2 | 0.7 | +0.1—1.5 |
| C. P. 32/337 | do | 4 | 0.9 | +0.1—2.0 |
| C. P. 34/115 | do | 2 | 0.7 | 0.4—1.0 |
| C. P. 33/229 | C.P. 27/139 X C.P. 31/432 | 1 | 0.9 | 0.9 |
| C. P. 33/232 | do | 3 | 0.7 | +0.1—1.9 |
| C. P. 32/202 | Co. 281 X C.P. 30/23 | 4 | 0.9 | 0.6—1.0 |
| C. P. 32/206 | do | 5 | 1.0 | 0.6—1.9 |
| C. P. 33/121 | C.P. 29/307 X C.P. 27/48 | 4 | 1.0 | 0.3—1.4 |
| C. P. 33/238 | C.P. 31/199 Selfed | 1 | 0.3 | 0.3 |
| C. P. 33/302 | C. P. 31/289 Selfed | 1 | 0.7 | 0.7 |
| C. P. 34/52 | Co. 281 X P.O.J. 2878 | 1 | 0.2 | 0.2 |
| C. P. 37/9 | C.P. 33/224 X C.P. 33/152 | 1 | 0.3 | 0.3 |
| **Varieties with Ratings Slightly Lower than Co. 281** | | | | |
| C. P. 36/94 | P.O.J. 2725 X C.P. 1165 | 1 | 1.3 | 1.3 |
| C. P. 32/133 | P.O.J. 2725 X C.P. 1161 | 1 | 1.4 | 1.4 |
| C. P. 32/135 | do | 1 | 1.4 | 1.4 |
| C. P. 32/324 | do | 3 | 1.4 | 1.1—2.0 |
| C. P. 32/335 | do | 1 | 1.4 | 1.4 |
| C. P. 32/336 | do | 2 | 1.1 | 0.1—2.1 |
| C. P. 34/165 | do | 2 | 1.3 | 1.2—1.4 |
| C. P. 34/54 | Co. 281 X C.P. 1165 | 2 | 1.3 | 0.4—2.1 |
| C. P. 36/23 | do | 2 | 1.4 | 1.1—1.6 |
| C. P. 34/79 | P. 33/30 X C.P. 1161 | 3 | 1.4 | 0.8—2.4 |
| C. P. 34/164 | do | 1 | 1.1 | 1.1 |
| C. P. 31/561 | Co. 281 X U.S. 1694 | 1 | 1.4 | 1.4 |
| C. P. 36/27 | do | 1 | 1.3 | 1.3 |
| C. P. 33/125 | C.P. 29/307 X C.P. 27/48 | 1 | 1.3 | 1.3 |
| C. P. 33/342 | do | 1 | 1.1 | 1.1 |
| C. P. 33/224 | C.P. 27/139 X C.P. 31/432 | 5 | 1.4 | 0.7—2.2 |
| C. P. 34/64 | Co. 281 X C.P. 29/290 | 1 | 1.3 | 1.3 |
| C. P. 35/14 | C.P. 31/78 Selfed | 1 | 1.4 | 1.4 |
| C. P. 37/3 | Co. 281 X C.P. 27/108 | 1 | 1.3 | 1.3 |

* See discussion under "Controllability of Factors Affecting Inversion of Sucrose", Par. 2—the duration of storage in the windrowing experiments was from 3 to 7 weeks.

** In some experiments certain varieties indicated an increase rather than a decrease in purity during storage. The plus rating values in this column were derived from such cases of apparent increases in purity.

ance to inversion of sucrose in Co. 281, one might expect that progenies with Co. 281 as one of the parents should yield a high percentage of windrowing canes. More varieties (74 in number) from the cross Co. 281 X U.S. 1694, from which C.P. 28/11 and C.P. 28/19 originated, have been tested than varieties from any other cross, with the result that up to the present not a single variety as resistant as Co. 281 has been found, although in a single experiment two varieties showed almost as great a resistance as Co. 281 (table 2). However, when Co. 281 was crossed with C.P. 30/23, a seedling from Co. 281 X U.S. 1694, two varieties (C.P. 32/202 and 32/206) out of the seven tested were as resistant as Co. 281. A more detailed discussion of the relation of resist-

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

ance to inversion of sucrose in parent varieties to resistance in offspring will be published later.

The prospects are also good for improving the resistance of varieties that satisfy commercial requirements other than windrowing. For example, C.P. 34/120, just released for commercial culture, and C.P. 34/139, a promising unreleased variety, appear to be slightly more resistant than Co. 290 (table 1). Current agronomic and pathological evaluations of some of the promising varieties listed in tables 1 and 2 are given in three recent reports (1, 3, and 5).

The results on commercial varieties (table 1) indicate that Co. 281 stands alone in its resistance to inversion of sucrose, with Co. 290, C.P. 29/116, and C.P. 29/120 forming a second but less resistant group. The remaining varieties form a third group, with C.P. 28/19 appearing at the top of the group. This grouping corresponds to a previous grouping (9) of most of these varieties, and indicates a rather stable condition among varieties regarding resistance to inversion of sucrose. This fact may be further illustrated by considering Co. 281 and Co. 290 as examples. In this series of experiments Co. 290 was compared with Co. 281 twenty-four times. Only in one of these experiments did Co. 290 show as small a drop in purity as that of Co. 281. In this one experiment it showed a lower drop in purity than did Co. 281. On the whole, the behavior of Co. 290 was better than the given rating indicates. The average rating was lowered by a greater drop in purity in a few experiments.

It will be seen from the results obtained with commercial varieties that special precautions (6) should be observed to mill the cane of the third group promptly or to provide means for keeping it moist during the interval between cutting and milling. It is a good practice to treat varieties of all groups in the manner recommended for group 3.

### Summary and Conclusions

A number of windrowing canes have been discovered and prospects are good for obtaining a satisfactory windrowing cane that meets other commercial requirements, and also for increasing the resistance in varieties used for other purposes than windrowing. Our knowledge of the relative susceptibility of commercial varieties has increased and should enable us to reduce the losses now occurring in the interval between the cutting and milling of all varieties, and particularly of the more susceptible varieties, by milling more promptly after cutting or by keeping the cane moist during that period.

---

*(Editor's Note—Literature cited in the foregoing article will appear in the next issue of The Sugar Bulletin).*

---

[1]Numbers in parentheses indicate references to Literature Cited at end of article.

[2]For example, during the grinding season of 1936-37, when the weather was fairly wet, C.P. 29/120 windrowed as satisfactorily as Co. 281, although normally there is greater, and sometimes considerably greater, loss in C.P. 29/120 than in Co. 281. (Unpublished data.)

[3]During the past two seasons (1940-41 and 1941-42) all samples were stored one-sample layer thick and separated from the next layer of samples (when present) and the ground by about 12 inches of air space. Formerly the samples were sometimes two or more layers thick. It is believed that the procedure followed during the last two years gives satisfactory results by insuring more uniform loss of moisture (7).

[4]The P.O.J. varieties tested were limited to those that have been grown commercially in Louisiana and to certain of those that have been used as parents.

DIFFERENT METHODS *but* THE SAME SPIRIT

In pioneer days a farmer needed a steady hand and good eyesight, not only to plow a straight row, but also to draw a bead on unfriendly Indians.

Since then farming has changed from power by horses to horsepower by tractors. But savagery and barbarity are again rampant in the world.

Southwestern farmers are riding their tractors to the roar of planes . . . the boom of guns . . . and the tramp of marching feet . . . but they are friendly sounds made by our boys preparing for military service.

Every plot of ground must be made to contribute its share of food and fibre toward the tremendous quantity needed in the world-wide fight for freedom.

B-MF-104

MAGNOLIA AGENTS

Offer immediate delivery of tractor lubricants and fuels

A SOCONY-VACUUM COMPANY

MAGNOLIA PETROLEUM COMPANY

LAMBORN & COMPANY, INC.
WHITNEY BUILDING
NEW ORLEANS, LOUISIANA
Complete Sugar Brokerage Service
RAW — REFINED FUTURES

LE BOURGEOIS BROKERAGE CO.
*Sugar Brokers*
203 Levert Bldg., 823 Perdido Street
Phones RA 0618—RA 0619
NEW ORLEANS

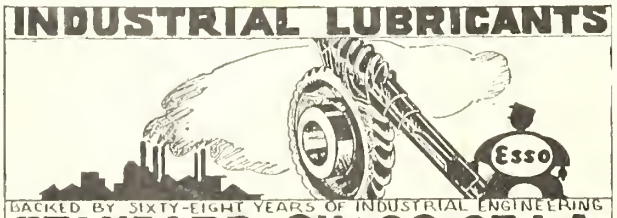
Phones RAymond 9035-9036 Established 1871
HARRY L. LAWS & CO., INC.
Brokers and Distributors
SUGAR and MOLASSES
SUGAR FUTURES
American Bank Building New Orleans, La.

GAY, SULLIVAN & CO., INC.
SUGAR
COW PEAS—FERTILIZERS
207 North Peters St. New Orleans, U.S.A.

STAUFFER, ESHLEMAN & CO., LTD.
NEW ORLEANS, LA.
Wholesale Hardware
AGRICULTURAL IMPLEMENTS
Distributors for Minneapolis Moline Implements and Studebaker Cane Gears

Nadler Foundry and Machine Co., Inc.
PLAQUEMINE, LA.
Manufacturers and Repairers
of
SUGAR MACHINERY

'AERO'
CYANAMID
AMERICAN CYANAMID CO.
30 Rockefeller Plaza New York

INDUSTRIAL LUBRICANTS


BACKED BY SIXTY-EIGHT YEARS OF INDUSTRIAL ENGINEERING
STANDARD OIL CO. OF LA.

FOR SUGAR CANE FINANCING
STATE AGRICULTURAL CREDIT CORPORATION, INC.
837 WHITNEY BUILDING
NEW ORLEANS, LOUISIANA

AMERICAN MOLASSES CO.
OF LOUISIANA
HIBERNIA BANK BLDG. NEW ORLEANS
Always in the Market for All Grades of Molasses and Syrups
Submit Your Offerings
Correspondence Invited

Domestic and Foreign
FINANCING
THE NATIONAL BANK OF COMMERCE
IN NEW ORLEANS

R. J. LEGARDEUR LLOYD R. MARKS
R. J. LEGARDEUR & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS
1002 Baronne Building 305 Baronne St.
Phone RAymond 3006
NEW ORLEANS

PENICK & FORD, LTD., INCORPORATED
Canal Bank Building
NEW ORLEANS
BUYERS OF ALL GRADES
OF SYRUPS AND MOLASSES

STANDARD SUPPLY AND
HARDWARE CO., INC.
NEW ORLEANS, LA.
Pipe, Boiler Tubes, Valves, Fittings
ALL KINDS OF SUGAR FACTORY SUPPLIES

E. A. RAINOLD, INC.
Foreign and Domestic
SUGAR AND MOLASSES BROKERS
201 Nola Building — 407 Carondelet St.
Phone RAymond 0679 NEW ORLEANS, LA.

"SERVING THE PORT OF NEW ORLEANS"
THE HIBERNIA NATIONAL BANK
IN NEW ORLEANS